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ABSTRACT

A guide of the associate student program at the Open University in England describes the system of study, 1979 courses, community education courses, future plans, relationship between the undergraduate and associate student program, and the higher degree programs. Information is provided on correspondence material, radio and television broadcasts, set books and background reading, tuition and counseling, assignment and examinations, summer schools, home experiment kits, the advisory service for applicants, and types of certification open to associate students. Courses for 1979 are described and are divided into the following sections: inservice education of teachers, health and social welfare, other courses developed in the post-experience course unit, and courses drawn from the undergraduate program. The community education courses last between 8 and 14 weeks and the level of demand differs from other course offerings. (SW)

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COURSES FOR ASSOCIATE STUDENTS PROSPECTUS 1979

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The Open University Planning Committee was set up in September 1967, following the publication of the Government White Paper, *University of the Air*; its task was to work out a comprehensive plan for the Open University, and at the end of May 1969 that plan became a reality with the granting of a Royal Charter.

The Planning Committee's Report *The Open University* stated that 'the main work of the Open University will focus upon adult students'. It saw the University not only as providing 'fresh and renewed opportunities' for those who wished to take a degree at undergraduate or postgraduate level, but also as providing 'post-experience' courses.

In January 1971 the University's first undergraduates started work on their studies and already over 27,500 have obtained the BA degree; a number of part-time higher degree students were registered from January 1972. The first post-experience students started their courses in January 1973. The post-experience courses now form part of the associate student programme which this *Prospectus* describes.

This *Prospectus* has been prepared by the Associate Student Central Office of the Open University's Registry.

The University wishes to emphasize that, while every effort is made to ensure accuracy, the material in this *Prospectus* is subject to later alteration or amendment in the light of overall policy changes or of financial or other constraints.

The Open University,
Walton Hall,
Milton Keynes, MK7 6AA

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STUDYING WITH THE OPEN UNIVERSITY

1

INTRODUCTION

The Open University has been described as the most important innovation in British education in the last half-century. Its significance lies not only in its multi-media distance teaching methods, but also in its concept of openness – providing education of university and professional standard for all those who are capable of it, regardless of their age, status, or previous academic qualifications, and its concern with the educational well-being of the community generally.

Unlike most other universities, Open University students and staff do not come together on a campus. Instead, a central core of academic and administrative personnel at the University's headquarters produce distance teaching materials – correspondence texts linked to radio and television broadcasts – which are sent direct to students' homes throughout the country. Students on most courses have a local link with the University through the part time staff, who provide varied support ranging from specific academic tuition relating to the content of the course to broader educational counselling designed to help students make the most effective use of the complex teaching system of the Open University. Over 60,000 people already study with the Open University in their own time. They are all adults in a wide variety of occupations – factory workers, white-collar workers, professional people and housewives.

The Open University provides fresh and renewed opportunities covering not one, but a range of educational experiences from which to choose – programmes of study compiled freely from the various faculties and leading to a Bachelor of Arts degree (either with or without Honours); research-based post-graduate studies involving the compilation of a dissertation or thesis; and single courses or groups of courses from the associate student programme.

THE CHOICE – A DEGREE OR SEPARATE COURSES

Everyone has his or her own reasons for studying. You may need a degree or a particular course to further your career or change your job. You may want to extend your knowledge of a particular subject or develop a new interest, or you may enjoy the stimulus and the challenge of university-level work for its own sake. The Open University offers a wide range of opportunities. You can take a series of courses to gain the BA degree, or study self-contained courses in the associate student programme. (Not all the courses offered in the associate student programme are at university level – see below.)

The associate student programme

The University's associate student programme comprises several different types of course, as follows:

1 Courses drawn from the undergraduate programme. The intention is that ultimately all courses developed for the undergraduate programme – other than the foundation courses – should be available in the associate student programme. Of the courses described in this *Prospectus*, thirty-nine are in this category. Some have been included because they also have some career enhancement or retraining potential, others because they enable students to develop existing interests or to explore new ones.

2 Courses specially prepared under the auspices of the University's Post-experience Courses Unit to cover identifiable areas; in particular those of the in-service training of teachers, health and social welfare, and community education. These courses have been designed primarily for adults who have had practical experience in a given field and wish to develop or broaden their skills and understanding to a higher level. Their course codes all have the prefix P.

3 The *Diploma in Reading Development* is a particular example of this, as it consists of four separate but closely inter-related courses which lead cumulatively to the award of a diploma. For a description of the composition of the *Diploma*, see page 13.

4 The Community Education courses are rather different from the other courses described in this *Prospectus*, as they are not designed or intended to be at university level, and do not involve the range of support services, e.g. regional support staff, offered to students on other courses. They are also shorter, lasting only 8–14 weeks. These courses are described in Section 4 of this *Prospectus*.

The BA degree programme

The Open University offers a general degree, which you can take with or without honours. It is called a Bachelor of Arts (BA) degree, whether you take arts or science-based courses, or a combination of both. Students registered in the BA degree programme are referred to as undergraduates.

There are over 100 courses available in the BA degree programme, from six main study areas, or faculties: arts, educational studies, mathematics, science, social sciences and technology. Each of these faculties offers a range of courses at four different levels of study – foundation, second, third and fourth – and you can choose courses from more than one faculty.

You begin your undergraduate studies with one or two foundation-level courses in your first year – even if you happen to have previous educational qualifications. (See section 6 for further information about this requirement.) The foundation courses introduce you to the University's teaching methods, and provide the basis on which you can progress to courses at other levels.

Most second-level courses have been designed for breadth, to give as wide a choice of subject matter as possible. Often third-level courses will be more specialized, or they may depend on skills acquired in earlier studies. At this and at fourth level, work will be assessed at honours degree standard, and so is more exacting than work at previous levels.

Further details of the BA degree programme and copies of the University's *Guide for Applicants for Undergraduate Courses* may be obtained from the Admissions Office, using the postcard at the back of this *Prospectus*. The application period for 1979 undergraduate courses is from 2 January 1978 to 15 June 1978.

Applications to the undergraduate programme are dealt with mainly on a first-come, first-served basis. Early applicants have a greater chance of being offered a place. However, there is no guarantee that you will be offered a place in any given year as thousands more applications are received than there are places available.

(The Higher Degree Programme – see Section 7)

ADVICE ON COURSE CHOICE

On the basis of the information provided in this *Prospectus* you will need to decide which, if any, of the courses described meets your needs, whether you are more interested in undergraduate or higher degree studies with the Open University, or whether you would prefer to look elsewhere for a course to suit you.

It is important to note that most of the associate student courses (those described in Section 3) are *university level* courses (at second or third level) and involve course material and assessment procedures commensurate with that. Indicative of this is that a Course Certificate awarded on the satisfactory completion of all the course requirements of *most* of these courses may be transferred as credit towards a BA degree in the event of an associate student gaining admission to that programme of study. Full details of this procedure are given in Section 6 of this *Prospectus*.

One of the important differences in taking an associate student course is that you may apply direct for the course of your choice without first devoting a year's study to fulfilling the BA degree programme's foundation course requirement. Before applying to the associate student programme, however, you do need to consider whether your level of familiarity with the scope and content of a chosen course or your previous educational or training experience can compensate for the absence of foundation level preparation. Our experience suggests that the majority of our previous applicants have coped, but it is, nevertheless, a question which ought to be carefully weighed as part of the decision to submit an application.

You are not restricted to the information in this book to help you make that decision, as the regional staff of the Open University, based at the thirteen Regional Offices around the UK, are able and willing to help and advise you. They can, for instance, arrange for you to see course material, discuss with you whether your background knowledge is sufficient to cope with the course you are thinking of taking, and suggest other (not necessarily Open University) courses which are available in your area if they seem more suited to your needs. Please feel free to contact your local Regional Office before making an application if you wish. (Addresses and telephone numbers are given in the booklet *How to Apply for an Associate Student Course in 1979*.)

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THE SYSTEM OF STUDY 2

This section describes how the Open University operates for students on those courses described in Section 3 only. The Community Education Courses have their own description in Section 4.

THE ACADEMIC YEAR

The University's academic year runs from 1 January to 31 December. There are 34 weeks from February to October during which teaching takes place at the undergraduate level. November and December are taken up with sitting and marking examinations and with course registration for subsequent years.

Most of the University's courses for associate students will adhere to this undergraduate pattern. Full details of course dates are given in the relevant course syllabuses in Section 3.

CORRESPONDENCE MATERIAL

At the beginning of the course and at regular intervals after that students receive correspondence packages through the post. Each package contains specially written learning materials, including correspondence texts which we call *course units*, together with associated course material such as radio and television broadcast notes, assignments and exercises for students to do and, in some cases, audio-visual materials such as records or slides for use in conjunction with the correspondence texts.

RADIO AND TELEVISION BROADCASTS

Open University television programmes are shown on BBC 1 and BBC 2; the radio broadcasts are on Radio 3 VHF or Radio 4 VHF. Broadcasts, which form an important element of some courses, rarely duplicate material in the correspondence texts; sometimes the programmes permit the author of a unit to explain some part of the week's work in more detail; other programmes bring recognized authorities, often from other universities or academic institutions, into the radio or television studio. One way to appreciate the very wide-ranging use of broadcasts is to listen and to watch for yourself now. Brief details of all Open University broadcasts are available in the *Radio Times*, *The Times Higher Educational Supplement* and a number of daily newspapers.

As an associate student you would have the advantage of having the week's texts and programme notes beside you as you follow the broadcasts. The times of all programmes are sent to students before their courses commence. Television programmes last 25 minutes; radio programmes 20 minutes.

SET BOOKS AND BACKGROUND READING

Courses may involve the use of two groups of books – set books and those recommended for background or preparatory reading.

Essential reading is contained in the correspondence material from the University, and also in a smaller number of set books *which students are expected to buy for themselves*. Many have been made available at a reduced price, by agreement between the publishers and the Open University, and will be kept in print for the duration of the courses.

Special arrangements are made each year with booksellers so that the set books are kept in stock. As a registered student you will receive lists of booksellers stocking Open University set books before the courses begin so that you may purchase the books in good time, and advice on how to obtain these if you experience difficulty.

You may also be interested in reading further about some of the topics covered in your course. Lists of books or articles recommended for background reading will be included in the correspondence material. These lists will also be published in advance for the information of librarians and booksellers; the books may be available in public libraries and also in some other local libraries. Reference to preparatory reading is included where relevant in the course descriptions given in Section 3.

TUITION AND COUNSELLING

The University employs more than 5,200 part-time course tutors and tutor-counsellors who provide local support for students studying on their own. The part-time staff are chosen not only for academic ability but also for personal qualities and for special interest in teaching adult students.

Course tuition

Open University courses are prepared for the part-time student studying at home. As an associate student you will, unless the information given for your course indicates otherwise, be attached to a *course tutor* who will receive your written assignments. The course tutor's job is to help you understand and learn from the course and its assignments. Thus he provides tutorials and will grade and comment on your written work in a way which will help you to see the stronger and weaker aspects. If you have further queries to take up after you receive your returned assignments, your tutor is ready to hear from you. All course tutors have correspondence from their students that is associated with assignments and the course in question; some are able to follow this up on the telephone or in person, but every course tutor is ready to respond by letter. *Correspondence tuition is the central and continuing teaching process in the Open University system.* **Face-to-face tuition will often be infre-**

quent and will be based on large urban centres with good communications rather than local centres. This conventional programme of tuition might be supplemented or sometimes totally replaced by telephone tuition or extended correspondence tuition. It is, therefore, essential that you should develop at an early date a dialogue with your course tutor.

Counselling

Associate students will also be assigned to a member of the part-time staff who will be responsible for counselling, that is, giving educational advice and guidance on the use of the multi-media teaching system of the Open University. Counselling is intended to help you make more articulate (and thus more deliberate) your choices as to methods of study – how much to study alone, how much with other students – and many other matters. In some cases this function will be carried out by your course tutor, but in others you will be allocated to a separate person for counselling only. In either case the person concerned will be immediately responsible for monitoring your overall academic progress and (if not your tutor) will receive copies of the course tutor's grades and summary comments and information on any computer-marked assignments.

The regions

The tutorial and counselling arrangements are organized on a regional basis. Each region under its Regional Director is responsible for providing a range of services to support students in their task of 'independent learning'. Among other functions the Regional Director, through his full-time staff:

1 maintains contact with local organizations (e.g. local education authorities, public libraries, employers, etc.) to ensure that students get maximum benefit from the facilities available in their area;

2 is responsible in conjunction with the staff at Walton Hall for organizing and staffing residential schools in the regions;

3 is responsible for the organization of the local study centres and the appointment of course tutors and counsellors.

Study centres

Wherever the concentration of students in a particular area justifies it we have set up a study centre. In general all students are encouraged to make use of the facilities at study centres, of which there are about 260.

Study centres are usually based in local colleges or other educational institutions, and are normally open on weekday evenings and sometimes on Saturdays. They provide facilities for all students, both undergraduate and associate, to meet each other for discussion and mutual help and in some cases may also be used for group and individual discussion with course tutors and tutor-counsellors. Many of our students like to attend study centres to enjoy the advantages of learning together, and such centres can form the base and starting point for many varied activities. Students on a course can get to know each other and arrange to meet in self-help groups or for social/educational sessions in or out of the centre. At many study centres it is possible to use the facilities of the library for private study and reference, and to use the common room facilities. It must be stressed, however, that not all associate students will have a tutor or counsellor based at their local study centre. Some may be some distance from their students and contact may, therefore, be mainly by correspondence or telephone.

Self-help groups

On many courses students are encouraged to form self-help groups. These are informal, and may result from individual student initiatives or from a deliberate attempt to establish them by the part-time staff. They are thought to be particularly valuable on courses with fairly scattered student populations, where face-to-face tuition is not likely to be available locally. The University will not release your name and address to other students to assist in setting up self-help groups unless you give your permission for this on the application form.

ASSIGNMENTS AND EXAMINATIONS

1 *Tutor-marked assignments (TMAs)*

You will be expected to complete written assignments to send to a course tutor for comment and marking. You will be informed of the progress you are making and the grades will be recorded for use as part of the assessment of your performance.

2 *Computer-marked assignments (CMAs)*

Some courses involve the completion of assignments which can be marked by computer. Such assignments will normally be counted as part of the assessment of the student's performance.

3 *Examinations*

Most courses combine assignment work with a written examination at the end of the course and the award of a Course Certificate will depend upon your performance in *both* the examination and continuous assessment (i.e. the assignments). The examination for courses A301, PET271 and T273 will be mandatory and no certification will be awarded to students who do not pass the examination. The examination for all courses other than A301, PET271 and T273 will be optional. If you pass the examination and the continuous assessment element you will be eligible for a Course Certificate; if you either fail or do not sit the examination but your continuous assessment is of a sufficiently high standard you will be eligible for the award of a Letter of Course Completion subject to the completion of any other stated course requirements.

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Course PA981 does not involve an examination. Students on this course will therefore be eligible only for the award of a Letter of Course Completion based on the standard achieved in their continuous assessment.

If you sit an examination but fail it you may be given the opportunity to resit the examination in the next academic year provided that the continuous assessment work has been satisfactorily completed.

Please note that to be eligible for the *Diploma in Reading Development* you must have a Course Certificate in each of the four courses involved, and must therefore take the examinations.

SUMMER SCHOOLS (RESIDENTIAL)

For certain courses you may be required to attend a one-week residential school in the summer months as indicated in the information given on particular courses in Section 3 (for example see A301).

The summer school week, at one of a dozen universities about the country, gives you a chance to immerse yourself in the course you are studying, and offers valuable contact with many other students and a variety of tutors. For some courses you will also have access to specialized equipment. Programmes include seminars and tutorials; field, laboratory and library work; and projects, performances and lectures. There are also informal discussions and social activities.

You should note that courses with summer schools have been designed with the residential week as an integral part of the course, and in registering for the course you accept an obligation to attend and to pay the fee.

For most students summer schools are an enjoyable and valuable part of their university experience. Many who did not look forward to the experience afterwards say that they have been 'kept going' by it. The University recognizes, however, that there may be some students who cannot attend summer schools: for example, those whose employers will not release them, those whose medical condition makes it impossible, or those unable to arrange for the care of dependants.

The member of part-time staff responsible for your counselling would be able to advise you, and, if need be, apply on your behalf for excusal from the attendance requirement in these exceptional circumstances.

You will receive more detailed information about dates and locations in December before your first year of study. In February you will be able to give your preferences for date (and sometimes, for location); we do our best, while fitting all students in, to cause as little inconvenience as possible.

Summer school lines fall into three categories:

1 *Course based* where one summer school week is an integral part of one course;

2 *Discipline based* where, by arranging some summer schools on a discipline basis, essential academic objectives of more than once course can be met without requiring attendance separately for each course, whether or not they are taken in the same year, and

3 *Joint* where certain courses share a summer school week when studied in the same year.

Students on courses A306 and SDT286 will be required to attend discipline-based summer schools. If you have a half-credit in the undergraduate courses S22— or S299 and attended the biology summer school you may be excused the requirement to attend again while taking SDT286. (As 1979 will be the first year of the A306 summer school, there cannot be excusal on the grounds of previous attendance.)

For courses T241, T242 or T341, or any combination of these, you will also be required to attend a discipline-based summer school. If you are taking more than one of these courses in the same academic year, you will only be required to attend one week of summer school to cover both, or all, courses. If you have previously attended a summer school for course T241, T242 or T341 (in either the undergraduate or the associate/post-experience programme) or for course TD342 (in the undergraduate programme) and have successfully completed that course you will normally be exempt from the requirement to attend the summer school for any of the other courses in that discipline.

Courses T291 and TS282 share a joint summer school. If you are taking both courses in the same academic year you will only be required to attend one week of summer school to cover both courses. However, attendance in a previous year for one of these courses *does not* exempt you from the requirement to attend a further summer school week in the year in which you take the other course.

If you are in any of the situations described above, please attach a letter to your application form giving details.

Finally you are asked to note:

(a) that the tuition fees indicated in this *Prospectus* do not include the summer school fee (in 1978 this is £50);

(b) that applicants are advised by the University not to commit themselves to attend more than two weeks of summer school in any one year, as they will almost certainly regret this for financial and educational reasons.

HOME EXPERIMENT KITS

Certain courses involve the use of a home experiment kit, which is sent to each student registered for the course. These kits contain equipment which is loaned to you by the University for the duration of your course. If you are taking such courses you are required

to pay a deposit which is repaid upon the return of the kit in its approved packaging at the end of the year. In addition, you will be required to sign a written undertaking accepting full liability for replacement and indemnifying the University from any liability arising from use or misuse of the kit.

COMPUTING FACILITIES

Many of the University's study centres provide a computer terminal so that students of courses which include an element of computing can obtain practical experience. If you are unable to attend one of these study centres an alternative postal service is provided.

CERTIFICATION

There are various types of certification open to associate students taking the courses described in Section 3:

1 the *Diploma in Reading Development*, awarded to students who gain Course Certificates in each of the four courses which make up the *Diploma* (see page 13);

2 a Course Certificate of the Open University, obtained by a student who satisfactorily completes the course work required of him, in terms of assignments and examinations, summer school attendance, (if required), and who fulfils the University's requirements for a particular course. (Please note that students taking course PA981 *Reformation Studies* are not eligible for this form of certification);

3 a Letter of Course Completion, obtained by a student who registers and completes the stated requirements of the course, but whose work is not formally examined. (Please note that for three courses, A301 *War and Society*, PET271 *Technology for Teachers* and T273 *Food Production Systems*, students are not eligible for this award since the examination is obligatory. A Course Certificate is the *only* form of Certification which students on these three courses may obtain.)

All of these are awarded subject to the fulfilment of the non-academic requirements of the course, e.g. payment of fees, return of home experiment kits where relevant.

HOW MUCH WORK IS INVOLVED?

It is not easy to study at home. You need a lot of willpower – and the support of other people. Ideally you should have a suitably quiet and private place to study.

The basic work required of you as a student is contained in the correspondence units, and in each teaching week you will be expected to read an appropriate amount of the correspondence material you receive and to complete the associated assignments. In addition there may be broadcasts to listen to or to watch, set books to read, practical exercises to complete using the computer terminals or home experiments kits, and the option of attending tutorials and counselling sessions at a certain study centre, or, on some courses, day schools at other centres, wherever these are provided. We describe all these activities as a unit of work.

With the exception of PA981 *Reformation Studies* all courses in Section 3 of this *Prospectus* are presented over a 32 or 34 week period. At the end of each course description you will see that we have indicated how many 'units of work' are involved. Each unit of work has been so designed that it will, on average, involve a student in approximately ten to twelve hours of study. Hence, courses of 32 or 34 units will involve that number of hours' study *per week*. Those of 16 units involve that amount of study *per fortnight*. However, this should only be interpreted as a rough guide, and you are strongly advised, when thinking ahead to the allocation of time for studies, to allow some margin for the re-establishment of study habits and the mastery of unfamiliar concepts of material.

In particular, the University would advise teachers in their probationary year, and other people in similar situations, not to undertake any of the courses listed in Section 3 of this *Prospectus* without very careful consideration of the demands on their time.

RECOGNITION

Where particular courses mentioned in this *Prospectus* have been recognized by outside bodies or institutions as contributing towards one of their own qualifications, this has been mentioned in the appropriate course syllabus. Please note that courses in educational studies, that is those with an E in the course code, are not intended to qualify students as teachers.

STUDENT PARTICIPATION

Every student who registers to study one of the courses in Section 3 with the University in 1979 will automatically become a member of the Students Association.

The governing body of the Association is an annual National Conference comprising representatives from all study centres, and there is a National Executive Committee which runs the Association between conferences.

The Association appoints representatives to most of the principal University policy-making committees. Its other activities include social events and educational tours, negotiating concessions, providing a range of welfare services, and in general promoting the educational interests of students, including representation to external bodies.

The Association also appoints students to the University's consultative structure. There are consultative committees linking students and part-time staff and full-time staff at regional and national level. All major policy developments of the Open University are discussed by these consultative bodies.

There is no compulsion to take part in any of these activities, but for many students new friendships are a pleasant by-product of their Open University studies. A remarkable sense of community exists despite the scattered nature of the student body.

ADVISORY SERVICE FOR APPLICANTS

The Open University operates a free advisory service for all applicants. The purpose of the service is to provide you with a better idea of what the University is, what the implications for you as an individual may be, and generally to assist you to prepare for when you begin studying. For applicants for associate student courses in 1979 this service will take two forms.

First, we hope to send every applicant offered a place on a course in the associate student programme a set of supplementary course notes giving an expanded description of the course. These notes will be designed not only to give a better insight into the scope and content of the course, but will also include suggestions, where appropriate, for preparatory reading.

In addition, applicants will have the opportunity to consult appropriate members of the regional staff, both full and part-time, in order to discuss individual study problems or difficulties.

Please see p. 3 of *How to Apply for an Associate Student Course 1979* for more information about this.

SPECIAL DIFFICULTIES, E.G. PHYSICAL HANDICAP

We know from experience that the methods of study adopted by the Open University can be particularly suitable for certain categories of students, such as the physically disabled, who may have difficulty in taking courses offered by other organizations. It is important to try to identify in advance the sorts of difficulties that may be posed for people with special problems by studying with the University, so that the student and the University can work together to overcome these difficulties or the University can advise the applicant that the difficulties cannot be resolved. For this reason, if you have any obvious or major difficulties which might affect your studies with the University, we ask you to attach a letter, indicating the type and extent of the difficulty, to your application form. We have in mind, for example, applicants who suffer from severe disability or immobility, whose domestic or occupational situation is not suitable for home-based study, whose mother tongue is not English or whose previous educational and/or occupational or training experience does not match that assumed in the design of the courses as they are described in the *Prospectus*.

Further information has been prepared to assist students with physical handicaps to choose courses. You can obtain this by writing to the Student Enquiry Service, The Open University, PO Box 71, Milton Keynes, MK7 6AG.

GROUP AND BLOCK BOOKINGS

Arrangements can be made for institutions, such as local education authorities or companies, to make group or block bookings on associate student courses. Requests for consideration should be sent to the Assistant Secretary (Associate Students), Associate Student Central Office, The Open University, PO Box 76, Milton Keynes, MK7 6AN stating the course and number of places required as soon as possible after the opening date for applications for that course. A block or group booking does not mean priority of booking, as places are still offered on a first-come, first-served basis. This means that it may not be possible to accommodate all requests. The Assistant Secretary (Associate Students) will advise on the options and conditions for block bookings.

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1979 COURSES 3

In 1979 the Open University will be presenting the following courses for associate students. Detailed syllabuses of these courses are given in this section. (Details of the Community Education courses available in the programme are set out in Section 4.)

None of the courses offered in the associate student programme *require* that students should have completed other Open University courses first, although in some cases this is highly recommended. For some courses, however, you are advised that you should already have some familiarity with a particular subject before registering and an indication is given in the text where this is thought to be advisable. This is often written in terms of formal qualification levels, which we call prerequisites, but they are not binding on you because you may have acquired the necessary background through previous study or experience. Particular attention is, however, drawn to the 'course level' rating at the end of each course syllabus.

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THE OPEN UNIVERSITY

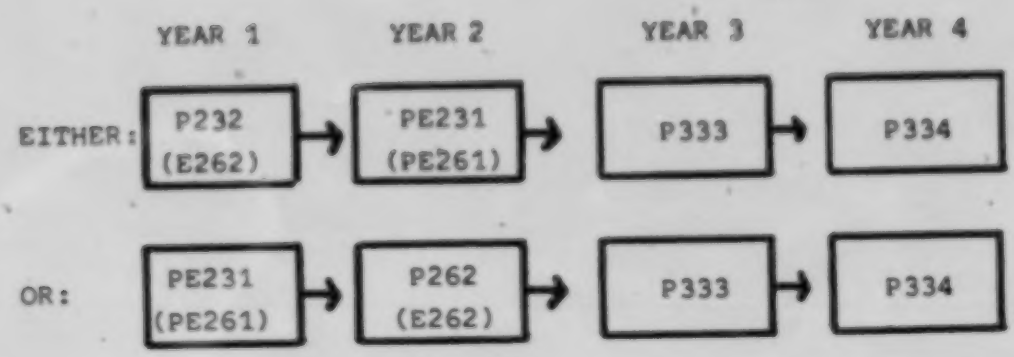
Courses for Associate Students - Prospectus 1979

E R R A T U M

Pages 13-14: "Applying for the Diploma in Reading Development"

The impression given by the decisions table on page 14, that students must complete PE231 (or PE261) before taking P232 (or E262) is incorrect.

Instead of the decisions table, the following flow chart should be read, as giving possible routes through the four Reading Diploma modules:



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* These courses are unlikely to be presented after 1979.

IN-SERVICE EDUCATION OF TEACHERS

For some years the Post-experience Unit has offered two courses which are specifically designed for the in-service education of teachers. These are *Reading Development* and *Technology for Teachers* (see below). *Reading Development* has now been combined with three other specially prepared courses, *Language Development*, *The Reading Curriculum and the Advisory Role*, and *Reading and Individual Development* to form the *Diploma in Reading Development*.

DIPLOMA IN READING DEVELOPMENT

The *Diploma in Reading Development* is the first diploma to be offered by the Open University. Following the recommendation of the Bullock Report, *A Language for Life*, that there should be a flexible interaction between practice and theory, the *Diploma* aims to develop practical teaching skills based on a sound theoretical foundation. It is made up of four courses:

PE231* *Reading Development* (replacing PE261 *Reading Development*)

P232* *Language Development* (replacing E262 *Language and Learning*)

P333 *The Reading Curriculum and the Advisory Role: Action Research Projects*

P334 *Reading and Individual Development: Action Research Projects*.

*PE231 and P232 may be taken independently. Each leads to the award of a Course Certificate or Letter of Course Completion.

Who may apply for the diploma courses?

The *Diploma in Reading Development* is essentially a professional qualification and is intended for a wide audience including both specialist teachers of reading and teachers of other subjects. It is also intended for advisors and educational psychologists and is of interest to tutors of adult illiterates. It should be emphasized, however, that the *Diploma* is not specifically designed for adult literacy tutors. They would need to modify their course work considerably to meet the demands of their own teaching situation.

The *Diploma* has been expressly designed for students who are involved in education in some professional capacity. Although there are no formal educational prerequisites, students will need access to children, or to adult illiterates either in an ordinary class, special class, remedial centre, nursery class, adult literacy centre, children's home, or some informal teaching situation. It would be very difficult to complete PE231 or P232 without some formal role in education. The later more practical courses, P333 and P334 would be virtually impossible without regular contact with a group of learners.

If you are in any doubt about your own situation please apply to your nearest Open University Regional Office for advice. You will be put in touch with a counsellor who will be able to help. *Please note that the University cannot help prospective students to find a group of learners to work with on these courses.*

Applying for the Diploma in Reading Development

Applicants for the *Diploma* must register for each course separately as there is at present no overall diploma registration. The *Diploma* will be awarded after a student has gained Course Certificates for all

four courses and has fulfilled any non-academic requirements of the courses. Students may count Course Certificates obtained for PE261 *Reading Development* and E262 *Language and Learning* in place of Certificates for PE231 and P232 respectively. Credits for these courses gained in the undergraduate programme may be counted even if they have already been used towards a BA degree.

Within the *Diploma* there is a clear progression from course to course. The following decisions table will help you to decide on a programme of work for the *Diploma*.

1	Have you completed PE231 or PE261 *Reading Development?* YES see item 2 below.	NO	You should begin by applying for PE231 *Reading Development.* See also item 2 below.
2	Have you also completed E262 *Language and Learning?* YES see item 3 below.	NO	You should apply for P232 *Language Development.* This course may be studied in parallel with PE231 *Reading Development.* See note A below.
3	Have you taken P333 *The Reading Curriculum and the Advisory Role?* YES see item 4	NO	If you have completed 1 and 2 above you should enrol for P333 *The Reading Curriculum and the Advisory Role.* See also item 4
4	You should now apply for P334 *Reading and Individual Development.* Please note that it is possible to take P333 and P334 concurrently *but* see Note A below. It is NOT advisable to take P334 *before* P333.		

Note A Prospective students are advised that the new diploma courses are *heavily practical* and involve a good deal of classroom work. You should not therefore apply to do more than one course in a particular year unless you are absolutely certain that your other commitments can be kept to a minimum.

PE231 READING DEVELOPMENT

This course, like its predecessor PE261, is concerned with improving standards of reading and the need for a better preparation for the reading demands of adult life. It emphasizes reading to learn in every area of the curriculum as well as learning to read.

Emphasis is on comprehension, rather than mere fluency, the development of efficient and effective reading, and the overall management of information. It will be of interest to teachers of children in middle schools and secondary schools as well as to teachers who are primarily concerned with beginning readers whether they are specialist subject teachers or teachers with general curriculum responsibilities. It will also be of value to advisers, lecturers, educational psychologists and to tutors in the field of adult literacy.

Regular access to children (even if only a group of 2 or 3 in the home), students, or adult illiterates is an essential part of many activities. Each unit of the course has work which relates directly to the classroom. Adult literacy tutors and others with small groups or individual learners will need to interpret this work in the light of their own situation. Lecturers, advisers, and non-practising readers must find a co-operative school or group of learners to work with.

Those students who have any queries regarding access to learner readers should contact their Regional Office for advice prior to registering for this course. It must be stressed that Regional Offices will not undertake to arrange access to schools for students engaged in this course. Any arrangement for access to schools is the sole responsibility of the student concerned.

A major aim of the course is to develop thinking about the nature of reading and the reading process as a preliminary to discussing improvements in the teaching of reading. This will involve being able to organize learning activities to ensure progressive development of reading and related skills necessary to meet the demands of adult life. Theoretical studies are introduced when they bear directly on some immediate teaching problem.

The course outlines methods of helping readers of all levels of ability, not just the less able. It is hoped that students will progressively revise their ideas about the levels of reading that pupils can comfortably achieve given sufficient opportunity and motivation.

A further aim of the course is to lead the student into contact with other people who are concerned with a child's or adult's reading development. If reading is important in every aspect of the curriculum,

then every teacher must be regarded as a teacher of reading. The course aims to develop awareness of roles which students may choose to undertake in relation to colleagues and others concerned with the teaching of reading.

The course also aims to help the student consider his own reading in order to acquire a greater insight into the tasks which the child must learn to cope with.

The course is essentially a series of workshops. Through these workshops, the student will be expected to develop and extend his own thinking, using the many and varied workshop activities as points of departure.

The course material consists of sixteen correspondence units, four set books, eight television and eight radio programmes. Tutorial support is provided but students will also be encouraged to work together in small self-help groups. Access to a cassette or tape-recorder would be a distinct advantage. There are four tutor-marked assignments forming the basis of continuous assessment; a number of tutorials will be held in the evenings or at the weekend. (Attendance at these is voluntary, although it is hoped that most students will be able to come to the sessions.) A three-hour written examination will be held at the end of the course.

Associate students who contemplate transferring a Course Certificate for this course for credit towards a current or subsequent Open University degree, or to study for the *Diploma in Reading Development*, should note that, because of similarity of content, this course is an excluded combination with its predecessor, PE261. You may not complete both courses for credit towards your degree or diploma.

Set books

Department of Education and Science *A Language for Life. A Report of the Committee of Inquiry Appointed by the Secretary of State for Education and Science under the Chairmanship of Sir Alan Bullock*, HMSO.

Hoffman, M. *Reading, Writing and Relevance*, Hodder and Stoughton Educational.

Williams, A. *Reading and the Consumer: a Functional Approach*, Hodder and Stoughton Educational.

Zimet, S. G. *Print and Prejudice*, Hodder and Stoughton Educational.

The following books should provide a useful general background to the course, but students should note that they are not expected to buy them. Moyle, D. (1972) *The Teaching of Reading*, Ward Lock Educational; Wilkinson, A. (1971) *The Foundation of Language*, Oxford University Press; De Leeuw, M. E. (1966) *Read Better, Read Faster*, Penguin; and chapters 6, 7, and 8 of the report of the Bullock Committee.

Students with a particular interest in early reading may wish to include the following book as additional recommended reading: Downing, J. A. and Thackray, D. V. *Reading Readiness*, University of London Press.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

P232 LANGUAGE DEVELOPMENT

Over the last decade language has become of central importance for all those concerned with education. This course aims to draw together some of the major issues of language, to enable students to understand the nature of language and to use this knowledge in promoting fluency and competence in language use.

Like the other modules of the *Diploma*, it is an activity based course and is designed for practising teachers. Those who do not have regular access to a classroom will not be able to do all the activities, and may have difficulty in covering some of the subject matter of the course. Students will be encouraged to explore and discover language skills and concepts. Throughout each section of the course, attention will be given to ways in which the teacher can actively apply his knowledge of language in the classroom.

Attention will be drawn to:

1 The nature of language – its structure and function;

2 the process of language acquisition;

3 the variations in language resulting from the speaker's background; the situation in which he is speaking and the medium (e.g. speech or writing) in which language is taking place;

4 the teacher's use of language in the classroom;

5 ways in which language can be developed across the curriculum.

The course will examine the various aspects of language from linguistic, psychological and sociological perspectives. The first half of the course will focus on the structure of language, providing students with analytic tools for describing the language process. The second half will be centred on the ways we use language within the social context, and ways in which we can develop language usage in the school.

The major areas of study are divided into six blocks of work. Eight cassettes will accompany the course which will exemplify concepts in the course and will provide activities essential to the course. Access to a tape-recorder is essential as students will be expected to collect samples of language for analysis.

There will be eleven television programmes which are considered essential viewing. The early broad-

casts will bring together aspects of language development covered in different parts of the correspondence text. Later programmes will look specifically at classroom procedures, classroom language activities, classroom language interaction and language policies.

Continuous assessment will be based on five TMAs. The overall continuous assessment grade will be calculated from the best four of the five grades awarded. There will be a final examination of three hours. A substantial part of the tutor-marked assignments will draw upon broadcast and cassette work.

The following books should provide an introduction to the topics in the course, but are not set books:

Crystal, D. (1976) *Child Language, Learning and Linguistics*, Arnold.

Stubbs, M. (1976) *Language, Schools and Classrooms*, Methuen.

Set books

Dale, Philip S. *Language Development: Structure and Function*, Second edition, Holt, Rinehart and Winston, 1976.

Trudgill, Peter *Accent, Dialect and the School*, Edward Arnold, 1975.

Course begins: February 1979

Course ends: November 1979

Units of work: six blocks (16 unit equivalents)

Course level: equivalent to second level (This course is not available in the undergraduate programme.)

Qualifications obtainable: Course Certificate and Letter of Course Completion

Course tuition fee: £70

Application period: 3 April–10 October 1978

P333 THE READING CURRICULUM AND THE ADVISORY ROLE: ACTION RESEARCH PROJECTS

The aims of the course are:

1 to provide opportunities for the systematic application of theory to practice in organizing those aspects of the curriculum in which competence in reading and study skills can best be developed;

2 to provide experience in the extended professional role.

Because of the practical nature of this course the content is best seen as a range of activities in which improved levels of efficiency are to be expected.

The activities are as follows:

(a) carry out an assessment of the reading interests and reading abilities of a class;

(b) survey and evaluate reading material in common use in each curriculum area and any additional material that might be profitably introduced as a means of developing reading;

(c) provide learning experiences, and introduce relevant media within the normal curriculum;

(d) evaluate the general progress made by the class;

(e) devise workshop activities to increase colleagues' competence in developing effective reading in each area of the curriculum;

(f) develop reading resources for use by children;

(g) develop reading resources for use by colleagues in other curriculum areas.

NB Each of the above objectives can be modified to meet the specific needs of students in different kinds of teaching situations, e.g. primary school, middle or secondary school, adult literacy centre, etc.

Assessment and tuition

There will be five tutor-marked assignments the first of which is a plan of the year's work and will be non-assessed. The overall continuous assessment grade will be calculated from the best three grades of the assessed tutor-marked assignments, the last of which will be double-weighted.

There will be a final examination of 3 hours' duration. Please note that, in view of the essentially practical nature of courses P333 and P334, no student who fails on the continuous assessment of these courses will be awarded a Course Certificate, regardless of his or her performance in the examination. A good pass in the examination will not be used to compensate for a fail on continuous assessment, as is the practice for other Open University courses, although it is necessary to sit and pass the examination in order to qualify for the award of a Course Certificate.

There are eight audio cassette programmes associated with the course which will be mailed to the student during the year.

A cassette recorder will also be needed for the preparation and analysis of materials on which the project(s) will be based. There are no radio or television programmes associated with this course.

Set books

Clay, M. *Reading: The Patterning of Complex Behaviour*, Heinemann Educational.

Fox, G., Hammon, G., Jones, T., Smith, F. and Sterck, K. (eds) *Writers, Critics and Children*, Heinemann.

Moyle, D. (ed.) *Perspectives on Adult Literacy*, United Kingdom Reading Association.

Moyle, D. and Moyle, L. *Modern Innovations in the Teaching of Reading*, University of London Press for UKRA.
Reid, J. *Reading Problems and Practices*, Ward Lock.
Robinson, A. *Teaching, Reading and Study Strategies: the Content Areas*, Allyn and Bacon Inc., McGraw-Hill.

All students will be expected to purchase the books by Reid; Moyle and Moyle; and Fox, listed above. Those whose specialist interest is first schools, remedial reading or adult literacy will be expected to purchase Clay, M. *Reading: The Patterning of Complex Behaviour.*

Those students whose main focus is reading in middle or secondary school will be expected to purchase Robinson *Teaching, Reading and Study Strategies: the Content Areas.*

Those involved in adult literacy work will be expected to purchase Moyle, D. *Perspectives on Adult Literacy.*

Course begins: February 1979
Course ends: November 1979
Units of work: equivalent to 16
Course level: equivalent to third level (This course is not available in the undergraduate programme.)
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £60
Application period: 3 April–10 October 1978

P334 READING AND INDIVIDUAL DEVELOPMENT: ACTION RESEARCH PROJECTS

The aims of the course are:
1 to provide experience in the systematic application of theory to practice in monitoring the progress of individual children and helping them to develop all-round competence as readers;
2 to provide experience in a supportive role (advising a contact group) and other extended professional roles;
3 to provide insight into the role of literature in education and competence in developing in each pupil a wide range of reading interests.

As in P333 the content is best seen as a range of activities in which improved levels of efficiency are to be sought. These are as follows:

(a) construct a comprehensive check-list of reading skills and sub-skill hierarchies relevant to the early stages of reading;
(b) specify ways in which parents can help children to develop those attitudes and abilities which provide the essential basis for early reading and reading development and cite relevant research evidence concerning each suggested method or combination of methods;
(c) specify ways in which the teacher can provide, in each aspect of the curriculum, those learning experiences which are most likely to promote reading development in the early stages and beyond;
(d) specify the more important factors to be taken into account in evaluating learning materials for reading development and evaluate such materials in terms of these criteria;
(e) specify, and use appropriately, formal and informal tests and procedures for monitoring reading progress in each skill area and evaluate these in terms of their adequacy for each of the various purposes of assessment;
(f) design an efficient and effective system for maintaining a record of reading progress that can be used to monitor the progress of each individual child during his school career;
(g) match learning materials and learning experiences to the current needs of each learner by means of diagnostic-teaching;
(h) relate to colleagues within the school, a teachers' centre, or a professional association, in workshop activities designed to increase their competence in fostering individual progress in reading;
(i) specify your own criteria for evaluating the adequacy of the total range of literature available to children in a particular educational context;
(j) evaluate individual books and collections of books in terms of these criteria;
(k) specify ways in which learners may be encouraged to develop their own criteria for selecting books and for evaluating those they have read;
(l) specify ways in which literature may be introduced to enrich each curriculum area and, at the same time, ways of extending the appreciation of literature *per se*, so that it does not become a mere adjunct to other sources of knowledge;
(m) develop in pupils an interest in writing as a means of self-expression and in writing for others;
(n) design some means of keeping track of the reading interests and reading habits of learners;
(o) specify ways of securing the co-operation of parents, school librarians, local librarians, and others in developing reading interests.

Assessment and tuition

There will be continuous assessment and an examination. The continuous assessment is based on three tutor-marked assignments, the first of about 2,000 words, the second and third of about 5,000 words, which are double-weighted. The overall continuous assessment grade will be calculated from the best four of the five grades given.

There will be a final examination of 3 hours' duration.

Please note that, in view of the essentially practical nature of courses P333 and P334, no student who fails on the continuous assessment of these courses will be awarded a Course Certificate, regardless of his or her performance in the examination. A good pass in the examination will not be used to compensate for a fail on continuous assessment, as is the practice for other Open University courses, although it is necessary to sit and pass the examination in order to qualify for the award of a Course Certificate.

There are audio cassette programmes associated with the course which will be mailed to the student during the year. Students will require regular access to a cassette recorder to gain optimum benefit from this material, and for use in the preparation and analysis of materials on which their project(s) will be based.

Summer school

Please note that, unlike the other three modules of the *Diploma*, there is a summer school associated with this course.

Set books

Chapman, L. J., Czerniewska P. (eds) The Course Reader (title to be agreed).

Grugeon, E. and Walden, P. (eds) *Literature and the Individual* (Provisional title), Ward Lock.

Course begins: February 1979
Course ends: November 1979
Units of work: equivalent to 16
Course level: equivalent to third level (This course is not available in the undergraduate programme)
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £60 (excluding 1979 summer school fee)
Application period: 3 April 1978 – 10 October 1978

PET271 TECHNOLOGY FOR TEACHERS

This course is intended for those teachers in secondary schools who are becoming increasingly aware of their responsibility for developing an appreciation of technology in their pupils and thereby helping to make the school syllabus more relevant to the modern world. No previous knowledge of technological subjects is necessary but students are expected to be practising teachers of pupils at secondary level (but disabled students will not be especially disadvantaged).

Course aims

The course has four major aims. The first is to provide the teacher with a basic knowledge of selected technological concepts and skills, particularly those relevant to the school situation. Second, the course aims to suggest ways of developing an awareness of the technological nature of modern society in secondary school children. Third, the course seeks to provide an introduction to appropriate teaching methods and examples of technological activities in schools. The fourth aim is to develop an appreciation of the implications that the introduction of technology in the school's curriculum can have for curriculum change and school organization.

Course content

The course is divided into five blocks, each covering three or four main topics. Two of the blocks deal with teaching problems and methods relevant to school technology and three are concerned with imparting a basic understanding of technological concepts. Throughout the course reference is made to case studies and examples of work being done in schools.

The first block, *Teaching Strategies*, discusses three different strategies which might be used to implement technological activities in schools: *Project Method*, *Structure in Courses*, and *Interdisciplinary Studies*.

The second block, *Fundamental Concepts in Technology*, discusses some of the concepts upon which technology is based, aiming both to provide the student with an understanding of these concepts and to suggest ways in which they might be introduced to pupils. Those covered are *Energy*, *Control* and *Systems and Design*.

Block III, *Selected Technology Topics*, deals with those topics selected from the wide spectrum covered by technology which are thought to be most frequently encountered by children and which are practical for the classroom. These topics are *Structures and Materials*, *Electronics*, and *Engines and Machines*.

Block IV, *Technology and Man*, draws together the concepts introduced in the earlier blocks in ways which illustrate their interaction with society. The areas covered are *Food*, *Communications*, *Transport* and *Industry*.

Block V, *Curriculum Change and Organization*, discusses the problems encountered by the teacher in designing a programme of work suited to his own curriculum area and to his own groups of pupils. The main areas of concern are: *Subject Areas and Resource Problems*, *Selected Age and Ability Groups* and *Syllabus Building and Assessment*.

Home experiment kit

As well as the correspondence material, the student will receive a small non-returnable home experiment kit for use with some of the technological units. (This will *not* require the payment of a deposit.) It will help

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towards a practical understanding of some of the technological concepts and should give the student ideas for using similar techniques in the school.

Tuition

Day schools and/or tutorial sessions will be arranged. Attendance at these will not be compulsory but it is hoped that most students will be able to take advantage of the opportunity to meet tutors and fellow students.

Broadcasts

There will be eleven television and eleven radio programmes associated with the course. Students should find that the programmes help to show how teaching technology can work, and how the ideas contained in the course can be exploited in the school situation.

Assessment

Our assessment of your progress will be based partly on the grades you receive in your continuous assessment, and partly on the result of the compulsory final examination.

Your continuous assessment will consist of four tutor-marked assignments (TMAs) and five computer-marked assignments (CMAs) based on the correspondence texts, broadcasts and set reading. The grades you receive in your three best TMAs and four best CMAs will be used for assessment. The assignments will be sent to you in the supplementary materials related to the appropriate block. The final examination will consist of one paper with questions relating to all parts of the course.

The College of Craft Education recognizes the Course Certificate as an integral part of its own programme of courses leading to the award of CCE qualifications.

Associate students who contemplate transferring a Course Certificate for this course for credit towards a current or subsequent Open University degree should note that it is an excluded combination with T100 *The Man-Made World: a Foundation Course*. You may not complete both courses for credit towards your degree.

Set books

Set reading for the course includes extracts from the two set books detailed below, which form an essential part of the course. The course reader, *School Technology in Action*, would also provide a useful introduction in school technology for those wishing to do some background reading before commencing the course.

Gordon, J. E. *The New Science of Strong Materials*, Penguin.

Marshall, A. R. (ed) *School Technology in Action*, English Universities Press/The Open University Press (Course Reader).

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualification obtainable: Course Certificate
Course tuition fee: £85
Application period: 3 April–10 October 1978

COURSES IN HEALTH AND SOCIAL WELFARE

The courses offered in this section are:

P251 *The Handicapped Person in the Community*
P252 *An Ageing Population*

A glance at the course summaries will show that these two courses have a common philosophy and approach. These courses are not directed specifically to members of any particular profession, though they are at a level which could make them a serious contribution to in-service training for many students. It is, however, assumed that students will have an interest and concern for the health and social welfare of one of these sections of the community. Indeed, the need for these courses arises from (i) the fact that concern for handicapped and older people is spread widely throughout the community as a whole; (ii) that while professional workers who come into contact with the handicapped and the elderly receive their basic training in many different disciplines, only a minority have the opportunity to take further specialized courses in either field; and (iii) that from the point of view of the client, support and services reach him from a bewildering variety of sources.

In designing these courses, therefore, the Post-experience Unit has tried to fill two educational gaps:

(i) the courses are *topic* based, so giving the student, whatever his previous training or experience, an opportunity to explore the whole field of problems and services associated with disability or ageing;

(ii) they focus particularly on the integration of the services, assisting the student to improve his ability to plan, communicate and co-operate both with clients and with other people concerned with their welfare.

It is anticipated that many though not necessarily all of the students attracted to P251 will also wish to take P252 and vice versa, and indeed that as further topic-based courses in the health and social welfare programme are developed (see section 5) there will be some students who will wish to extend still further their interest in this area of study.

P251 THE HANDICAPPED PERSON IN THE COMMUNITY (formerly PD251)

The course aims to improve professional and social skills in order to assist handicapped people to achieve maximum autonomy, and is intended primarily for people whose professional activities bring them into contact with handicapped people – social workers, teachers, therapists, health visitors, nurses, doctors, and members of other supportive professions. Students who have had no professional or personal experience of the situation of handicapped people may successfully follow the course. However, it is assumed that most students will be familiar with some of the problems of handicapped people, but that their knowledge may be limited to a particular professional approach or to one specific type of handicap, and those lacking previous experience may find some sections a little difficult and requiring a little more time than originally scheduled. Nevertheless, many such students have successfully completed the course in previous years and students may find it useful for a possible future career in this area of social concern. Students who are themselves disabled are encouraged to apply.

The course examines professional roles and ideologies and encourages an inter-professional approach to problems. Actual case histories are provided for analysis. The course should enhance the student's capacity for informed co-operation with other workers, with disabled people and with the wider community. A successful student should be able to take a lead in involving his local community where necessary in positive action for the improvement and expansion of services.

The sixteen units of the course are grouped into blocks. The first of these, 'A handicapped identity', contains three units which will encourage students to think clearly about the implication of being handicapped. Students will explore the sociological background and the social effects of being considered 'different' and of being unable to do certain things or participate in certain relationships.

In the first unit the student will consider the problem of the person who becomes handicapped in adult life. The second unit looks at the effect of having a handicapped child on parents and family life. The third unit develops the theme further by analysing the development of the handicapped person, particularly in the key periods of his life, e.g. the transition between home and school, and between school and the community.

There are five units in the second block, 'Disability and assisted independence'. The first is entitled 'The medical approach to handicap', and in the following four the student will identify and examine the special problems and needs of those with hearing and visual impairments, the physically handicapped and the chronically sick, and the mentally handicapped. The aim of this block is to equip the students with knowledge and understanding of a wide range of alternative aids, treatments and techniques as a background to the making of appropriate decisions in individual cases. The student will examine the contribution of modern technology to aids for the handicapped; the availability and use of aids will be discussed and illustrated by specific case studies. The units also look into the provision of services and discuss how far these meet the educational and social requirements of people with different types of handicap.

Block three consists of five units in which the student will examine in detail the provision of education, occupational training and financial support for those with handicaps. The first is concerned with the setting of goals and the evaluation of progress when working with handicapped people, the second with professional practice and with the nature of relationships between the professional worker and the disabled person and his family. The third discusses special education and the various alternatives at present being explored and examines how decisions are made on behalf of the individual child. The problems of employment, employers' attitudes, planning a career and promotion are then examined. The final unit in this block is concerned with planning and designing a suitable physical environment in our streets and buildings.

In the final block of three units entitled 'Facing the future', students will look at the existing services and assess how far they will meet future needs. They will go on to examine political, legal and economic aspects of services for the handicapped. Finally, the course explores community attitudes and community action. It discusses the politics of voluntary organizations and outlines objectives for community projects for the disabled.

Television and radio programmes (11 of each) are closely integrated and students will be encouraged to form self help groups (comprising students with different professional and personal experiences as well as differing abilities) for study and support during the year and on project work.

Students are set four assignments for their continuous assessment work. An alternative question is set for each assignment and the third and fourth alternative assignments include two stages in small-scale local project work.

The following books are recommended as preparatory reading for the course: Younghusband, E. et al (1970) *Living with Handicap*, National Children's Bureau; Rose, J. (1970) *Changing Focus*, Hutchinson, and Topliss, E. (1975) *Provision for the Disabled*, Blackwells.

Set books

Anderson, E. (1973) *The Disabled Schoolchild*, Methuen.

Boswell, D. M. and Wingrove, J. M. *The Handicapped Person in the Community*, Tavistock Publications in association with the Open University Press (Course Reader).

Jay, P. *Coping with Disablement*, Consumers' Association.

Miller, E. and Gwynne, G. *A Life Apart*, Tavistock Publications.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

P252 AN AGEING POPULATION

The overall objectives of this course are to enable the student to:

1 assess the contribution that the older person can make to the social, cultural and economic life of the community;

2 analyse the relationship between the individual's experience of ageing and the society that structures it;

3 identify the causes of the main social, economic and health problems which may affect elderly people and the ways these different factors may interact to produce hardship in individual cases;

4 evaluate in comparative terms the resources allocated and the services provided for older people, and make realistic proposals for improvements where present provision is thought to be inadequate;

5 develop and extend practical skills for assisting older people to achieve a way of life which gives maximum personal satisfaction and autonomy compatible with individual circumstances;

6 define the specialist roles of the various helping professions and explain the contribution that each can make to the solution of individual problems, through multidisciplinary teamwork and in co-operation with clients and members of the wider community.

It is therefore particularly suitable for students whose professional activities bring them into contact with older people (doctors, nurses, health visitors, therapists, social workers, hospital staff, workers in residential care and some administrators) and for community, voluntary and neighbourhood workers. It should also be of interest to people (particularly perhaps older students) who have a general interest in the sociological, economic and welfare implications of a population which, it is projected, will over the next twenty years include a progressively increasing proportion of older people. Although the course includes material designed both to deepen and widen the knowledge of those who already have some specialist training (particularly at the points of professional practice which call for communication and interaction with others, professional, client, or lay), it has a practical bias and all its main discussions should be readily accessible to the non-professional student.

The course is in 16 units grouped into five blocks. The first block 'Ageing in Society' examines the individual's experience of ageing in the context of the society in which he lives and compares the main social and economic factors that have affected 'ageing' at different historical periods, in different societies and in different social classes. Some common myths and stereotyped attitudes towards old age are sifted and the underlying realities are sought in research. Among the 'life events' common to many older people in our society explored in this unit are occupational age-prejudice and retirement. The position of the older person in family life is examined in historical and cultural terms. Block 2 is a largely practical block which begins with a brief outline of the physiology of ageing and contains three units concerned with preparation for later life, and maintaining health, engagement, satisfaction and autonomy in the community. They provide guidance on practical resources: services, facilities and benefits available to older people in Britain.

Block 3, called 'Crisis', is concerned with those occasions, which occur for many old people, when independence is threatened, for example, by illness, disability or loss of a supportive relative. In the first unit, the concept of crisis is analysed through case studies and there are units which deal with medicine and surgery in old age and with mental health and psychiatric problems; while Block 4 is concerned with the care and support services needed by a person unable to care fully for himself. One unit deals with teamwork and communication between individuals and service teams; another with rehabilitation and resources for home support and a third with various types of sheltered and residential care. The final block deals with population projections, the allocation of resources and short and long term planning.

Television and radio programmes are closely integrated. A series of television case studies develops the life-event approach to ageing, while radio will be used (i) to develop comparative studies of attitudes and practices in other countries and cultures and (ii) to analyse communication skills with the aid of case studies. Activities are also an integral part of the course structure and students are encouraged to form self-

help groups for study and project work. Opportunities will be provided in each region for meetings and discussions with a tutor and with fellow students. There are four tutor-marked assignments which form the basis of continuous assessment and students who merit an average 'pass' grade on three assignments will receive a Letter of Course Completion. There is a final, optional examination and students achieving a pass on a combined continuous assessment and examination grade are awarded a Course Certificate.

Preparatory reading

Students are strongly advised to prepare themselves by reading Puner, M. (1974) *To the Good Long Life: What We Know About Growing Old*. This is one of the set books for the course and a first reading before the course begins will provide a background as well as saving later study time.

Set books

Brearley, C. P. *Social Work, Ageing and Society*, Routledge and Kegan Paul.

Carver, V. and Liddiard, P. *An Ageing Population: A Reader and Source Book*, Hodder and Stoughton Educational.

Hodkinson, H. M. *An Outline of Geriatrics*, in 'Monographs for students of medicine' Series, Academic Press.

Puner, M. (1974) *To the Good Long Life: What We Know About Growing Old*, N.Y. Universe Books (UK edition in preparation).

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: equivalent to second level (This course is not available in the undergraduate programme).
Qualifications obtainable: Course Certificate or Letter of Course Completion.
Course tuition fee: £70
Application period: 3 April–10 October 1978

LEARNING MATERIALS

In addition to the courses described above the Post-experience Unit in collaboration with Newcastle upon-Tyne Polytechnic has produced a non-paced, non-assessed study text with an accompanying reader, which will be available from bookshops in February 1978 in two volumes:

Child Abuse: A Study Text, edited by Vida Carver, Open University Press.
Child Abuse: A Reader and Source Book, edited by Constance M. Lee, Open University Press.
For colleges or groups wishing to adopt the texts as a course for their own use, there is also a specially prepared supplementary package of learning materials entitled:

Child Abuse – Teacher's Pack, edited by R. Fothergill and S. Hurley, obtainable only from Open University Educational Enterprises Ltd., 12 Cofferidge Close, Stony Stratford, Milton Keynes, MK11 1BY.
Please note that this is *not* a course in the associate student programme. Any enquiries should be directed to Open University Educational Enterprises Ltd., 12 Cofferidge Close, Stony Stratford, Milton Keynes.

OTHER SPECIALLY DEVELOPED POST-EXPERIENCE COURSES

The courses listed below were developed to be of particular interest to people with relevant working experience in the areas concerned.

PA981 REFORMATION STUDIES

Course Syllabus

This course is an advanced level adaptation of one section of the Open University course A201 *Renaissance and Reformation*, which is offered at the undergraduate level as part of the BA degree programme. It is a self-contained block of units dealing with the origins and developments of the Reformation movements of the sixteenth century. Adapted and expanded for the needs of more advanced students, it will provide them with an opportunity for intensive study of the subject spread over a period of about five months. It is intended to enable those who already have some knowledge of the history of the Christian religion to deepen their understanding of the Reformation and to situate it in the wider historical context of the age.

It is envisaged that the course will be of special concern to teachers of religion and of history and to clergy who wish to reinforce their earlier studies. It will also have interest for all those who wish to explore the roots of the differences between the Christian churches and to understand their varying doctrines, practices and traditions.

As well as the principal objective, namely, to give

the student an overall grasp and deeper understanding of the events, ideas and development of the Reformation era, the course also aims to help him to develop these more general abilities:

1 to recognize the interaction of secular and religious factors in history;

2 to distinguish critically between partisan and objective writing on the history of religion;

3 to analyse the meaning of key religious terms and articles of belief;

4 to examine the unity and inner coherence of systems of theological doctrine;

5 to understand the motives and ideals of religious thinkers who have powerfully influenced others, whether one agrees with those ideals or not.

There are 8 units in this course, divided into 4 parts as follows:

Part I Origins of the Reformation
Part II Luther and Lutheranism
Part III Calvin and Other Reformers
Part IV The Catholic Reformation

Each of these parts represents about a month's work for associate students. They will be required to write four essays (tutor-marked assignments), each covering one part of the course. There will be twelve supporting broadcast components – eight radio and four television programmes. Students will also be provided with the opportunity to attend a tutorial discussion.

There will be no final examination, but the four tutor-marked assignments will be assessed to give each student an overall grade for the course. Those who satisfactorily complete at least three out of these four assignments will be awarded a Letter of Course Completion.

Preparatory reading

It is not essential for the student to do any preparatory reading before the course, but he would find it useful to have read through at least three of the set books listed below: that is, Hay, D. *Europe in the Fourteenth and Fifteenth Centuries;* Chadwick, O. *The Reformation;* and Bainton, R. H. *Here I Stand: A Life of Martin Luther.*

Set books

Bainton, R. H. *Here I Stand: A Life of Martin Luther*, Mentor/New English Library.

Chadwick, O. *The Reformation* (Pelican History of the Church), Penguin.

Hay, D. *Europe in the Fourteenth and Fifteenth Centuries*, Longman.

Janelle, P. *The Catholic Reformation*, Collier-Macmillan.

Koenigsberger, H. G. and Mosse, G. L. *Europe in the Sixteenth Century*, Longman.

Rupp, E. G. and Drewery, B. (eds) *Martin Luther* (Documents of Modern History), Edward Arnold.

Wendel, F. *Calvin: The Origins and Development of his Religious Thought*, Fontana.

Course begins: May 1979
Course ends: September 1979
Units of work: 8
Course level: The course may be regarded as more demanding than the second level undergraduate course from which it is adapted.
Qualification obtainable: Letter of Course Completion
Course tuition fee: £20
Application period: 1 September 1978–14 February 1979

PM951 COMPUTING AND COMPUTERS

Nature of the course

Computers are now being employed in more and more facets of our society. Unfortunately, however, the potential social and economic gains which could come from this ever-increasing use are being frustrated by the limited number of people able either to use computers effectively or even to communicate freely with those who can use them.

Computing and Computers has been designed to combat this problem. It is a first course of study in the subject but is certainly much more substantial than a typical introductory course. It is also very much more than an 'appreciation' course, for one of its principal aims is to enable the student to evaluate the use of the computer in his own environment.

The course assumes no previous knowledge of computing, while the minimum knowledge of mathematics which is essential to complete the course is arithmetic and algebra of the first two years of secondary education. The course materials do, however, include a number of examples which demand more advanced mathematical knowledge and techniques but these are present only as optional activities and can be avoided by any student who so wishes.

Naturally, no single first course could possibly cover the entire field of this subject, but our aim none the less has been to give as broad a view as possible and to achieve this by concentration on the underlying concepts rather than on techniques. Each fundamental theme is presented as fully as possible and bias towards any particular aspect of the subject has in general been minimized. Nevertheless, the treatment of commercial computing has been emphasized at the expense of the less prevalent scientific use of the machine.

Although the course will not, for example, teach a qualified systems analyst or experienced programmer anything significant about his own discipline it does, however, include information about the various branches of the subject which is likely to be unknown to someone who has worked in only one field and it will accordingly prove valuable to any such specialist who wishes to obtain a broader view.

The course has been specifically structured to include sufficient material to enable any schoolteacher, of whatever discipline, to learn enough about computing to incorporate the use of computing techniques in his teaching of his subject. It is also aimed directly at people engaged in management who need to understand the significance of the computer in their present and future work and who find difficulty in communicating with the specialists responsible for running the computer system itself.

About one quarter of the course is devoted to practical computing. This begins with simple exercises, but, by the end of the course, reaches some degree of sophistication. The work is preferably carried out at an interactive terminal but the alternative of a postal service is available.

Every chance is taken to illustrate the areas of society and the ways in which the computer is actually being used today. A number of examples have been developed in depth as case studies, these being drawn from as wide a spectrum of usage as possible.

The present and future impact of the computer on our society is debated at length in order to present a balanced picture of the range of optimistic and pessimistic views which are currently held.

Aims and Objectives

The course aims to enable its students to answer the following questions:

1 Why does modern society need to process information?
2 Why is it important to organize and structure information which is to be processed?
3 How does the use of a computer determine the structure and organization of information?
4 How can I decide whether a particular task can be carried out by a computer?
5 What are the various stages involved in using a computer to solve a problem?
6 What relevance does computing have to my personal and business affairs?
7 Why do many people view the computer with awe or fear and to what extent are they justified?
8 What are the probable future effects of the use of the computer on our daily life?
9 What value can I personally expect to find in further study of this subject?

Components of the Course

The correspondence material includes 8 course books and 16 correspondence texts. There are also 12 television and 12 radio programmes with their associated broadcasting notes. Each student is expected to spend at least 10 hours in practical computing, either at one of the terminals of the Open University Student Computing Service or by use of the postal computing service. The continuous assessment of the student's progress will be based on the best four out of five assignments and there will be an optional final written examination. A number of voluntary tutorial sessions will be held in the evenings or at the weekends.

From 1978 PM951 has been included in the undergraduate programme. It is therefore now possible for a Course Certificate for PM951 to be counted as a half credit at second level towards the BA degree. Please note, however, that PM951 is an excluded combination with M251 *An Algorithmic Approach to Computing*; you may not count both towards a BA degree.

PM951 is one of a group of four courses which is under consideration for the purpose of exempting course credit holders from the whole or part of the British Computer Society Part 1 professional examination. Of the other courses in question only M351 *Numerical Computation* is at present available in the associate student programme.

Set books

There are no set books for this course.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £75
Application period: 3 April–10 October 1978

PT272 ENVIRONMENTAL CONTROL AND PUBLIC HEALTH

In recent years there has been a growing public awareness of the inroads modern industrial society is making into the world's limited natural resources and of its impact on the natural environment. The provision of a ready supply of energy, the availability of clean water and air, the disposal of industrial and domestic wastes and excessive noise are factors influencing the development of a modern urbanized society.

This course provides a basic understanding of our natural resources of clean air and water and of environmental problems such as waste disposal and noise pollution. The course is about the technology, as well as the legislation we can use to control our exploitation of the natural environment and its limited resources. A key theme is the interrelatedness of environmental problems, and how an integrated approach to solving them is necessary.

The aims of the course are to show that:

1 environmental matters must be considered in any

planning, industrial or technological context;
2 the integrity of the biological cycles must be preserved;
3 a narrow training in any one aspect can lead to further problems and that no pollution or resource management problem can be tackled without regard to pollution conversion or amenity considerations;
4 the responsibility of the engineer and scientist in particular, and all informed people in society in general, is to conserve resources and minimize pollution so that succeeding generations are well served;
5 morbidity, mortality and the limits of our knowledge of what constitutes good health practices place constraints on how far we can exploit resources or create pollution or introduce new synthetic products whose effects may not be felt until one or two generations later;
6 the influence of individuals, people *en masse*, pressure groups and established organizations can be felt in the formulation and enforcement of legislation.
Also the course aims:
7 to review relevant legislation;
8 to give an understanding of pollution control measurements and techniques.

Environmental Control and Public Health has been designed both for those with a professional interest in the environment and for laymen who wish to take an informed stand on environmental issues.

PT272 can be taken on its own as a broad introduction to the field, or in combination with other courses as a part of a study programme in which other environmental courses are taken. Other courses which complement PT272 are: DT201 *Urban Development*, D291 *Statistical Sources*, T262 *Man-made Futures: Design and Technology*, S266 *The Earth's Physical Resources*, S2–3 *Environment* and S232 *Ecology*.

The course has fifteen units, as follows:
1 Introduction and unifying themes
2 Environmental health
3 Water: origin and demand
4 Water: conservation and abstraction
5 Clean and dirty water
6 Water: analysis, standards and treatment
7 Water: distribution, drainage, discharge and disposal
8 Administrative control
9 Municipal waste disposal
10 Hazardous wastes
11 and 12 Control of the acoustic environment
13 and 14 Air pollution
15 Air pollution control

The home experiment kit includes a rain-gauge, a dissolved oxygen electrode/meter, a colorimetric comparator (for chemical determinations), a smoke stain apparatus for particulate matter measurement and a sound level indicator. A slide viewer and slides will also be included so that each student may see vivid examples of, say, the effects of air pollutants on plant life and lung tissue and the effects of excessive noise on the auditory system.

The kit is designed to allow the student to measure important parameters of water, air and noise pollution and to test concepts of the course in a practical manner.

Several home experiments are incorporated into the course and the student has a choice of which two are to be assessed.

Assessment

There are four TMAs and five CMAs of which the three best TMAs and four best CMAs will count towards final assessment. In two of the four TMAs a report on a choice of home experiments is a compulsory feature.

Broadcasts

The broadcasts are integral parts of the course and contain additional material which, while not essential for successfully completing the assignments, will considerably enrich students' understanding of the subjects matter.

Set books

Porteous, A., Attenborough, K., and Pollitt, C. J. (eds), *Pollution: the Professionals and the Public*, Open University Press.

Overman, M. *Water: Solution to a Problem of Supply and Demand*, (2nd edn), Open University Press.

The Open University AST281 *Science and the Rise of Technology since 1800*, Unit 10, *Science and Public Health*, The Open University Press.

Course begins: February 1979
Course ends: November 1979
Units of work: 15
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £85
Returnable deposit for home experiment kit: £10
Application period: 3 April–10 October 1978

PT281 INDUSTRIAL RELATIONS (formerly P881)

This course will interest both industrial relations practitioners and those with a more general interest in the subject. Among the groups of practitioners who are likely to find the course of value are those who:
1 already have some responsibility for industrial

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relations in companies, employers' associations, trade unions or government departments;
2 are about to move or have recently moved to positions where their responsibilities in whole, or in part, include industrial relations;
3 are completing courses for professional qualifications which include industrial relations;
4 are responsible for industrial relations training;
5 teach industrial relations in institutions of further or higher education.

Most industrial relations practitioners will have a considerable body of experience to which the material in the course can be related but the course caters for the 'general interest' student in two ways: firstly, it contains a number of case studies which – among other things – provide a series of 'real life' examples of a range of issues, problems and organizational patterns; secondly, the approach adopted in the course is one that involves those without specific experience as well as developing the range of skills and the framework of reference of the practitioner.

The group designing the course deliberately sought to avoid involvement with specific industrial relations issues or with 'nuts and bolts' techniques through a concern to avoid that which rapidly becomes obsolete and that which is best taught through intensive face to face methods.

The course will not teach negotiating skills nor does it analyse the current interpretations of, say, the Employment Protection Act. It will, however, contribute towards the former and probably make the student more aware of the significance of the latter or, for that matter, of other general changes affecting industrial relations such as the current phase of incomes policy. The course seeks to achieve this through developing a broad based study of British industrial relations which emphasizes the values of comparison of different patterns of industrial relations and aims to advance analytical, evaluative and explanatory skills. Collectively this should provide the student with a more comprehensive frame of reference which for the manager or for those on the factory or office floor, may usefully be applied to the specific issue.

Course syllabus

One way in which some order may be brought to the complex pattern of industrial relations behaviour is by looking at the underlying nature of the relationship of employment within which work is organized and, at the complex system of industrial relations 'rules'. These are developed by a variety of means and seek to control and structure workplace behaviour by laying down procedures or standards on anything from clocking on, work norms or pension entitlements to the relationship between effort and reward or the administration of workplace discipline. In examining this basic structure a number of important questions are evident such as the need for rules, how they are altered or enforced and, perhaps most significantly, why rules such as those formally agreed by employers and unions are often very different from actual patterns of behaviour. One of the ways in which the course seeks to answer such questions is by looking at *who* is concerned with rule making and enforcement (and why) and the *means* whereby the rules are created and administered. Thus one of the fundamental divisions in the course material is between what are termed the industrial relations *institutions* and the *regulatory processes*.

It is evident however that any satisfactory analysis of industrial relations must also consider the broader contexts – the technological, the organizational, the economic, the social and the political – to which any pattern of industrial relations should be related. These broader *environmental* factors are introduced in two units and analysis of the interaction between industrial relations and environmental factors occupies a further six units. To further explore the nature of this interaction, a series of case studies has been designed to provide comparative material and to illustrate some of the concepts and analyses developed in the course. The industries chosen for study are the national newspaper industry, the hotel industry, the National Health Service and the coal industry. A fifth case study is concerned with an issue that is and will continue to be of importance to practitioners for some years to come – workers' participation. Two smaller scale case studies – of the dock industry and a multinational company (Ford Motors) – rely largely on televised material. The written case studies are closely integrated with the television and radio components of the course. These studies will enable the student to relate the more theoretical units to specific industrial situations and his own experience.

Overall the aims of the course are as follows:
1 to analyse the complexity and diversity of industrial relations;
2 to develop the student's awareness of the interaction between industrial relations and the broad range of economic, social, technological and political factors;
3 to promote a multi-disciplinary approach to the study of industrial relations;
4 to apply concepts and theories developed in the main body of the course to a number of industries by means of case studies;
5 to develop the student's analytical, interpretative, evaluative and explanatory skills and his/her ability to apply these to specific issues.

The course includes sixteen teaching units, eleven television programmes and eleven radio programmes. Continuous assessment involves four computer-marked and four tutor-marked assignments.

Students who show evidence of satisfactory progress throughout the course will receive a Letter of Course Completion. An optional examination will be offered to students who wish to obtain a Course Certificate, which may be counted as a half credit for a BA degree.

Set books

Barrett, B., Rhodes, E. and Beishon, J. (eds) *Industrial Relations and the Wider Society: Aspects of Interaction*, Collier-Macmillan.

Course begins: February, 1979
Course ends: November, 1979

Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £80
Application period: 3 April–10 October 1978

COURSES DRAWN FROM THE UNDERGRADUATE PROGRAMME

The courses from the undergraduate programme which are made available to associate students are not designed to present any form of coherent programme within the associate student programme, but to be available as single courses to the wider public.

A202 THE AGE OF REVOLUTIONS

The course examines major themes in European history and culture in a period of unprecedented, rapid and significant change c. 1775–1830.

The basic themes concern the nature and varieties of 'revolution' in the period: political, social and economic changes in the age of the Industrial, and 'Democratic' Revolutions and Napoleonic and Restoration period; changing attitudes among intellectuals and artists towards man, society and the nation-state; the growth of 'consciousness'; the movement from 'classicism' to 'romanticism'; and the role of science.

Specific topics studied in depth include:

1 political, social and economic change and the applicability of the term 'revolution' (units 1–8);

2 a series of individual case-studies: Jefferson and the American Revolution (units 9–10); Rousseau, Goethe and *Faust*; the poetry of Wordsworth (units 11–14); Kant and the 'revolution' in philosophy (units 15–18); Sir Humphry Davy and developments in physical science (units 19–20); the poetry of Blake (units 21–22); the concept of 'high art' and the reaction to it (units 23–24); Beethoven (units 25–27); relationships between art and politics in France (units 29–30); the evangelical movement and religious change in England (units 31–32);

3 a novel, Stendhal's *Scarlet and Black* (1831), reflecting *inter alia* several topics studied in the course. The novel will be read concurrently with the rest of the course (unit 28);

4 conclusion: an inter-disciplinary exploration of the theme of 'Romanticism' (units 33–34).

There are 10 tutor-marked assignments associated with this course which form the basis of continuous assessment. The optional final examination is of three hours' duration.

There are 34 radio programmes and 17 television programmes.

Records

Two records, one on *Beethoven* and one on *Romanticism*, are included in the course material, so students will need to have access to a record player.

Set books

Ashton, T. S. *The Industrial Revolution 1760–1830*, Oxford University Press.

Bottrall, M. (ed) *William Blake: Songs of Innocence and Experience*, Macmillan.

Bronowski, J. (ed) *William Blake: A Selection*, Penguin.

Crehan, T. (ed) *The Poetry of Wordsworth*, University of London Press.

Eitner, L. *Neo-Classicism and Romanticism, 1780–1850* Vol 1, Prentice-Hall International.

Ford, F. L. *Europe 1780–1830*, Longman.

Friedlaender, W. *David to Delacroix*, Schocken Books/Bailey Bros. & Swinfen.

Godechot, J. *France and the Atlantic Revolution of the 18th century, 1770–1799* (trans Rowen, H. H.), Collier-Macmillan.

Hartley, H. *Humphry Davy*, S. R. Publishers/E. P. Publishing.

Hobsbawm, E. J. *The Age of Revolution 1789–1848*, Cardinal.

Howse, E. M. *Saints in Politics*, Allen & Unwin.

Paton, H. J. *The Moral Law*, Hutchinson University Library.

Rousseau, J.-J. *Confessions*, Penguin.

Sonneck, O. G. (ed) *Beethoven: Impressions by His Contemporaries*, Dover Publications/Constable & Co.

Spender, S. (ed) *Great Writings of Goethe*, Mentor/New English Library.
Stendhal, *Scarlet and Black*, Penguin.
Sullivan, J. W. N. *Beethoven*, Allen & Unwin.
Williams, M. (ed) *Revolutions 1775–1830*, Penguin/The Open University Press (Course Reader).
Wright, D. (ed) *Penguin Book of English Romantic Verse*, Penguin.

Course begins: February 1979
Course ends: November 1979
Units of work: 34
Course level: Second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £100
Application period: 3 April–10 October 1978

A241 ELEMENTS OF MUSIC

This course was originally designed to prepare students for third and subsequent level specialist music courses, especially A304 *The Development of Instruments and their Music* and A308 *The Rise of Modernism in Music 1890–1935*. It will also be of interest to people with some musical background, for example playing an instrument or singing in a choir, and to those without knowledge of the technical aspects of music, but with a love of music and a desire to study it in some depth. For these latter students, there will obviously be more work to start with. If you are an absolute beginner, please be sure to consult your regional advisory service (see p. 11) before committing yourself to the course.

Aims of the Course

The general aim of this course is to familiarize students thoroughly with the elements of music, develop aural perception, teach score-reading, and give them the technical knowledge to practise harmonic and stylistic analysis of the period between about 1730 and 1900.

Course content

The course falls into three main blocks, together with aural training, score-reading, and stylistic analysis, all reinforced by practical experience of playing a recorder.

The first three-unit block deals with rudiments (elements, notation and terminology) and has exercises in 'score-reading' and aural training. Students without previous knowledge will find this block rather dense and full of facts to be learnt. Those with half-forgotten experience must make themselves secure in these areas. The core of the course follows: nine units concentrating on harmony and style. Students themselves will work exercises of an elementary nature – phrases in major and minor keys, modulation, simple harmonizations and so on – and will learn to do harmonic and stylistic analysis by discussion of more advanced harmony, texture, and style.

Students may find that the course reaches its peak of demand by unit 8, where they are required to do harmonization, since we feel that not until they have worked exercises themselves in detail will they appreciate fully and be able to analyse thoroughly the workings of the 'masters'. After unit 8 the course makes different demands of a more analytical and less 'doing' nature.

Units 13–15 deal with form in a refreshing and unpedantic way. The last unit is devoted to a quick study of orchestration – mainly orchestral sonorities, examples for which have been specially written and recorded.

Tuition

There is no summer school, but tutorial arrangements are made to reinforce all aspects of the course.

Assessment

There are eight half-length tutor-marked assignments, six of which will be used for assessment purposes. Listening to the radio broadcasts is essential for the completion of the first four assignments, since a type of aural work forms part of these assignments. There is a three-hour examination at the end of the course, half of which is devoted to a harmony question, a quarter to questions on stylistic and harmonic analysis and a quarter to form and orchestration.

Equipment required

Specially prepared gramophone records are provided to accompany the units, and it is therefore essential that students should have easy access to a gramophone. In addition to these the course team provides small electronic keyboard instruments to enable students to hear what they write. Correspondence tuition on playing a recorder runs for the first twelve units of the course, and a recorder of one size or another must also be bought. Do not buy one until you have read the advice provided by the course team in the Course Guide.

Broadcasts

There are sixteen radio programmes and eight television programmes. On the whole these reinforce the written material. Certain radio programmes contain aural exercises as part of assignments. These are indicated in the Broadcast Calendar.

Disabled students

The course is not suitable for students who are aurally disabled. Visually disabled students will need the help of an amanuensis, and if they tackle the course, must have a good ear. It is hoped that a cassette version of

the course may be available for blind students from 1979.

Set books

Bloom, E. *Dictionary of Music* (5th edn), Dent.

Hosier, J. *Instruments of the Orchestra*, Oxford University Press 1977. Book only.
(Also available in a 'package' with illustrative records which are *not* set materials.)

The gramophone record which students need to buy is:

Boult, A. *Instruments of the Orchestra*, Music for Pleasure (Number CFP 400 74.)

Students are also required to buy a recorder; these are available from about £2.00.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £75
Returnable deposit for home experiment kit: £10
Application period: 3 April–10 October 1978

A301 WAR AND SOCIETY

The course will be of special value to those whose training in the study and teaching of history pre-dates the significant expansion in the area of recent history, and the significant developments in new techniques and approaches which have taken place in the last five years or so, but who are anxious for professional reasons to master these new developments.

While the course will, above all, be of value to teachers of history in schools and colleges, the special emphasis placed on the uses of archive film material might make this an attractive course for those in the communications field generally, particularly those whose work takes them into the general field of historical studies.

Course syllabus

Essentially this is an honours level history course (roughly of the standard of a second year course in a traditional three year English single honours history course), but it does involve contributions from the other humanities (particularly literature) and from the social sciences. The basic concern of the course is with the social implications of war; it is in no sense concerned with military history as such. The bulk of the course deals with war and society in the twentieth century but there are substantial sections on the Revolutionary and Napoleonic Wars and on war and society in the nineteenth century; and, since the approach is essentially thematic, brief examples are drawn from the entire span of human history.

The sixteen television programmes are all archive film compilations devoted to the study of the use of archive film for the historian of the twentieth century. The sixteen radio programmes are used to knit the various elements of the course together, and include discussions, specialist talks and programmes on war poetry and war music.

The structure of the course is as follows:

Block 1 The Study of War and Society: Thucydides to the Eighteenth Century (4 units)

Block 2 Documents (Collection of nineteenth- and twentieth-century documents, part I)

Block 3 The Revolutionary and Napoleonic Period (4 units)

Block 4 War and Society in the Nineteenth Century (4 units)

Block 5 World War I (4 units, including one unit on Russia and Germany, and one unit on The Literature of World War I)

Block 6 Documents (Collection of nineteenth- and twentieth-century documents, part II)

Block 7 Between Two Wars (2 units)

Block 8 World War II (3 units, one on Germany, one on Britain, and one on the Resistance)

Block 9 War, the Arts and Ideas (3 units)

Block 10 World War II Outside Europe (2 units, one on the Far East, and one on the American Negro)

Block 11 War, Peace, and Religion (2 units)

Block 12 War in Our Own Day (2 units, one on Science and War, and one on Guerilla Warfare)

Blocks 2 and 6 are devoted entirely to presenting a collection of primary sources.

Students who wish to undertake preparatory reading for the course may wish to read the following, the first of which is a set book: Fuller, J. F. C. (1972) *The Conduct of War 1789–1961*, Eyre Methuen; Howard, M. (1970) *Studies in War and Peace*, Maurice Temple Smith; Marwick, A. (1974) *War and Social Change in the Twentieth Century*, Macmillan.

Students taking the course will be expected to complete nine tutor-marked assignments and six computer-marked assignments. There is one week's residential summer school which students are expected to attend. The final examination is of three hours, duration.

Set books

Barbusse, H. *Under Fire*, Dent.

Bramson, L. and Goethals, G. W. (eds) *War: Studies from Psychology, Sociology, Anthropology*, Basic Books/ Harper & Row.

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Ferguson, J. (ed) *War and the Creative Arts*, Macmillan (Course Reader).
Florinsky, M. T. *The End of the Russian Empire*, Collier-Macmillan.
Ford, F. L. *Europe 1780–1830*, Longman.
Fuller, J. F. C. *The Conduct of War, 1789–1961*, Methuen (University Paperback).
Livingstone, R. W. (ed) *Thucydides: The History of the Peloponnesian War*, Oxford University Press (World Classics).
Marwick, A. *The Deluge: British Society and the First World War*, Macmillan.
Palmer, A. W. *A Dictionary of Modern History, 1789–1945*, Penguin.
Roberts, J. M. *Europe 1880–1945*, Longman.
Taber, R. *The War of the Flea*, Granada (Paladin).
Taylor, A. J. P. *The Origins of the Second World War*, Penguin.
Waugh, E. *Officers and Gentlemen*, Penguin.
Wright, G. *The Ordeal of Total War 1939–45*, Harper & Row.

Course begins: February 1979
Course ends: November 1979
Units of work: 32
Course level: third
Qualification obtainable: Course Certificate
Course tuition fee: £100 (excluding the 1979 summer school fee)
Application period: 3 April–10 October 1978

A306 TWENTIETH CENTURY POETRY

This course provides a study of twentieth-century poetry from 1910–70. Units 1–17 concentrate mainly on the opening decades of the century, discussing the poetry of Hardy (units 2–3), Pound (unit 6), Eliot (units 7–11) and Yeats (units 14–17), together with the origins and nature of the 'modernist' movement in poetry (units 4–5) and the relationship of Wilfred Owen's poetry to 'modernism'. Units 21–26 discuss the principal poets of the years 1930–50, namely Auden, other thirties poets, and Dylan Thomas. MacDiarmid's poetry is included at this point. Some modern literary critics (units 18–19 William Empson and F. R. Leavis) and some poetry in translation from French (unit 13 Guillaume Apollinaire), German (unit 20 R. M. Rilke) and other European languages (unit 32 East European Poets) will also be studied. Units 27–32 give a more selective attention to poetry of the years 1950–70, and the extent to which it both inherits and reacts against the 'modernist' tradition established earlier in the century.

The course has two principal aims: to provide students who have a particular interest in literature with an opportunity to develop their knowledge of poetry, as a literary genre, to balance the study of the novel, provided by A302 *The Nineteenth-century Novel and its Legacy* (available 1973–78; it is planned to introduce a similar course in the future) and to examine the poetry of this century in relation to certain critical theses about its development, notably the role of 'modernism'.

Assessment

There are eleven assignments of which the first is voluntary and ungraded and the last necessary for assessment purposes. The precise topic of the last assignment will be chosen by students in consultation with their tutors from a wide range of possibilities suggested in the course. The eight best assignments (excluding the first and including the final) will count towards the continuous assessment overall grade.

Prerequisites and preparatory reading

Students should have some preliminary experience in the study of literature (not necessarily of poetry). The wholly inexperienced student could profitably read unit 9 of A100 ('The Language of Poetry'), and A202 units 21–22 (Blake) and 13–14 (Wordsworth).

As preparatory reading, students are especially recommended to read the poetry of Thomas Hardy, T. S. Eliot and W. B. Yeats.

Summer school

From 1979 there will be a discipline-based Literature Summer School which A306 students will be required to attend. Successful A306 students will not be required to attend the summer school again if they take the further full-credit literature course planned for the early 1980s. Literature students need practice in the analysis of literary texts much in the same way that science students need practice in the conducting of laboratory experiments. The principal academic aim of a summer school will be to make that experience possible, in the context of the course work, which will be modified accordingly. From it students should gain:

(a) confidence in their ability to articulate their own response to works of literature, which comes from group discussion under the guidance of tutors;

(b) deeper understanding of the creative character of literary language, whether in prose or poetry;

(c) direct experience of a greater range of expert opinion about works of literature than any particular set of correspondence units is able to provide;

(d) assistance in the task of writing about literary works in a coherent and analytical fashion.

Broadcasts

The general aim of the sixteen television and sixteen radio programmes is to complement the course units

by offering an additional, in some cases, a contrasting approach to the poetry studied throughout the course. There are interviews with poets and critics studied in the course, talks by outside contributors and by members of the course team. In two programmes we have recorded performances of verse plays by W. B. Yeats

Gramophone records

The course material includes four gramophone records, so students will need access to a record player:

OU 21 *Rhythms of Poetry*
OU 22 *Thomas Hardy and Ezra Pound*
OU 23 *The Poems of T. S. Eliot*
OU 24 *W. B. Yeats and W. H. Auden*

These records are intended to encourage students to think of poetry in terms of its sound. In some cases, more than one reading of the same poem has been recorded in order to bring out the way different readings can throw light on the poem's complexities of meaning.

Set books

Auden, W. H. *Collected Shorter Poems 1927–57*, Faber.
Eliot, T. S. *Collected Poems 1909–1962*, Faber.
Hardy, Thomas *Poems of Thomas Hardy, A New Selection*, Creighton (ed), Macmillan.
Leavis, F. R. *New Bearings in English Poetry*, Penguin.
McDiarmid, Hugh *The Hugh McDiarmid Anthology*. Grieve and Scott (eds), Routledge & Kegan Paul.
Martin, G. and Furbank, P. N. (eds) *Twentieth-Century Poetry: Critical Essays and Documents*, The Open University Press.
Pound, Ezra *Selected Poems 1908–1959*, Faber (1975 edition).
Press, J. *A Map of Modern English Verse*, O.U.P.
Skelton, R. (ed), *Poetry of the Thirties*, Penguin.
Southam, B. C. *A Student's Guide to the Selected Poems of T. S. Eliot*, Faber.
Stead, C. K. *The New Poetic*, Hutchinson University Library.
Thomas, Dylan *Collected Poems*, Dent.
Rilke, R. M. *Duino Elegies*, trans. Leishman and Spender, 4th edn, Chatto and Windus.
Yeats, W. B. *The Collected Poems*, Macmillan.

Course begins: February 1979
Course ends: November 1979
Units of work: 32
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £100 (excluding the 1979 summer school fee)
Application period: 3 April–10 October 1978

A322 ENGLISH URBAN HISTORY 1500-1780

The course aims to provide

1 A special knowledge of the changing shape and function of the English urban community from the late Middle Ages to the early industrial period;

2 a broader understanding of the structure of early modern society;

3 a general awareness of the many skills and techniques of the urban historian.

Though grounded in the history discipline, the course will obviously take into account recent work of demographers, geographers and other scholars working in the urban field.

The course has been planned in four blocks of four units:

Block One: The Urban Setting
1 Introduction: Defining the Town
2 The European Context
3 English Urban Landscape
4 Documents Collection. This includes transcripts of both printed and manuscript sources for the whole course. It will be used with the course units and for assignments

Block Two: The Fabric of the Traditional Community
5 The Fabric of the Traditional Community: Economic and Social Structure
6 Political Organization in the Sixteenth-Century Town
7 The Cultural Function of the Traditional Town
8 The Cultural Role of Towns in the late Sixteenth and Seventeenth Centuries

Block Three: The Traditional Community Under Stress
9 Urban Crisis or Change?
10 Economic Growth and Change in Seventeenth Century English Towns
11 Social Problems and Social Policies
12 The Triumph of Civil Oligarchy in the Seventeenth Century?

Block Four: The Rise of the New Urban Society
13 London 1660–1780
14 Spas and Seaside Resorts 1660–1780
15 The Industrial Towns Before the Factory
16 Conclusion

This is a third level course, and students should have a grounding either from experience or from formal study in the compilation of ideas and written work based on original and other sources. The course also assumes a general acquaintance with English history of the period covered by the course. The course follows on chronologically from A201 *Renaissance and*

Reformation (which is not available in the associate student programme), but there are links with sections of AMST283 *Science and belief: from Copernicus to Darwin* and A301 *War and Society*, both of which are included in the associate student programme.

The 8 television broadcasts will provide vital visual data on the changing face of the early modern English town; the 8 radio programmes will explore the many different sources and skills of the urban historian and will be of particular use to those undertaking the local project.

There are five tutor-marked assignments associated with the course. The final examination is of three hours duration.

One special feature of the course will be that students will be able to combine two tutor-marked assignments and write an extended essay on one aspect of a local urban community in this period; the research will involve using printed primary sources.

Set books

Clark, P. (ed) *The Early Modern Town: A Reader*, Longman (Course Reader).

Clark, P. and Slack, P. *English Towns in Transition*, Oxford University Press.

George, M. D. *London Life in the Eighteenth Century*, Penguin.

Hill, C. *Reformation to Industrial Revolution* (Pelican Economic History of Britain) Penguin.

MacCaffrey, W. T. *Exeter, 1540–1640*, Oxford University Press (Reprinted 1976).

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third level
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April – 10 October 1978

A351 MODERN ART FROM 1848 TO THE PRESENT: STYLES AND SOCIAL IMPLICATIONS

The course is devised for students who have an interest in modern art, and wish to study the subject in depth. There are no prerequisites, but some background knowledge of the main art movements during the period would be an advantage.

The course aims:

1 to investigate the developments of the visual arts in the period covered by the course;

2 to place the art of this period in its social context;

3 to ventilate and discuss the many, sometimes irksome, questions which the startling and, to some, repellent character of modern art raises.

The structure of the course is as follows:

Units 1–3 The Roots of Modern Art; Charles Baudelaire: Vanguard of Modernism; Optimism and Pessimism in the late nineteenth century. This first block explores the influence of romanticism; the character of social realism; a commentary on the work and influence of Baudelaire and some discussion of the Impressionist movement and of the French symbolists.

Units 4–5 A New Beginning: Primitivism and Science in Post-Impressionist Art; Return to Nature. These units cover the rise and development of post impressionism, placing work in a wide social context, and introducing students to the work of Paul Cézanne and his 'deference' to nature.

Unit 6 The Emergence of Modern Art in the Early Twentieth Century. This single unit raises and discusses many of the problems posed by modern art, with particular reference to literary commentary and criticism.

Units 7–9 Cubism: The Disrupted and Constructed Image; Language of the Feelings: Figuration and Abstraction in Expressionist Art; Futurist Art and the Dynamism of Modern Life. This section covers three important art movements of the period. The Cubist unit pays particular attention to the work of Picasso and Braque and is also designed to focus the student's attention on the works of art themselves, exploring their formal characteristics. Unit 8 covers the European Expressionist movement, with a discussion of its philosophical and social background; the final unit here is concerned with the Italian Futurist movement, and the impact of technology on visual style and subject matter.

Units 10–12 Art in Russia: From The Easel to the Machine. *De Stijl:* The Reconstruction of Life through Art and Technology. Artists of the Bauhaus: Painters and Sculptors at Weimar, Dessau and Berlin. Much of the work in these units includes original research by the authors. They examine the immediate post First World War developments in art, and all link closely with political and philosophical theories. The growth of 'abstract' art is discussed as well as the rationale behind its various forms.

Units 13–14 Liberation through Art: Dada and Surrealism. An examination first of what is sometimes termed the 'anti-art' phenomena of Dada and tracing the rise of Surrealism, again linking the art movement to a wide literary and philosophical background.

Units 15–16 Art since 1945. A survey of post-war art to the present day, with particular reference to art in the USA. These final units, with their own supplementary appendix of critical and artists' writings, bring the course up to 1973. It includes

discussions of some of the most 'difficult' art works and theories, such as art language and Conceptual Art, attempts to indicate their artistic heritage, and to clarify the intentions and aims of the artists concerned.

From the brief descriptions given above, the Course Team would like to emphasize an important point. A narrative description of the various stylistic changes is certainly an integral part of the course. (See Course Aims 1.) But of equal importance is the intention to place visual art in a wide social field, to trace the influence and the relationship of works of art with literature, with science and technology, with philosophy and psychology. And throughout the course these other factors are constantly referred to. This course is not in any sense an exercise in research methodology, it has a far wider, and we feel, a more valid basis. Quoting the Guide to the Course 'Modern art hinges heavily on the conditions of the outside world. Modern art may not reproduce that world, it may not even represent it, but undeniably it reflects it.'

There is no summer school. Students will be encouraged to visit their local art galleries, private and public, and a list of exhibitions being shown at major galleries during their year of study will be sent to them.

Students will be set five tutor-marked assignments, the best four of which will be counted for assessment purposes. There is a three-hour examination divided into three parts, the first of which will be an exercise in comparing works of art. A considerable choice of questions is offered.

The radio and more especially the television broadcasts form an important element in the course, so students who cannot receive these will necessarily be at some disadvantage. A colour set will enhance the value of many television programmes.

The first television programme will deal with media distortion in the presentation of the visual arts, and is intended to alert students to the ways in which the appearance and indeed the meaning of a work of art can be altered by the manipulation techniques of camera, lighting and even sound. Other programmes will deal with subjects relevant to the correspondence texts but which are better conveyed by television. There are eleven television programmes in all.

Five of the sixteen radio programmes will be devoted to philosophers and critics of art. These will be presented by outside specialists. Seven radio programmes will involve the use of illustrations.

Preparatory reading

Students could usefully acquaint themselves in advance with the set book, Hamilton, G. H. *Painting and Sculpture in Europe 1880–1940*, Pelican History of Art, Penguin.

Set books (paperback editions)

Chipp, H. B. *Theories of Modern Art*, University of California Press.

Haftmann, W. *Painting in the Twentieth Century*, Vol 2 (Plates), Lund Humphries.

Hamilton, G. H. *Painting and Sculpture in Europe 1880–1940*, Pelican History of Art, Penguin.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications attainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

AM289 HISTORY OF MATHEMATICS

There are no special prerequisites. The aim of the course is to develop in the student an understanding of the way in which mathematics evolves and of the role which it has played in general cultural history through studying the history of the evolution of a number of selected mathematical concepts and techniques from ancient times until the present century. The course is not a detailed chronological account of mathematical history. It comprises eleven units devoted to different topics, such as 'Numbers and Counting', 'Paradoxes', 'the Solution of Equations', 'Projection', etc. and five units devoted to an area of special study, where there is a choice between 'Origins and Development of the Calculus' and 'Counting, Numerals and Calculation'. The eleven general units and the second of the two special study options are intended to be suitable for all students, whether or not they have a specifically mathematical background. Although this course has been designed specifically with the non-mathematician in mind, it will nevertheless be of particular interest to teachers of mathematics at all levels and the special study option on the Calculus will provide the latter with an opportunity for in-depth study. Each student will, however, have an entirely free choice as to which special study he undertakes.

For assessment purposes, students are required to submit four out of six computer-marked assignments and three out of four tutor-marked assignments (TMAs). However TMA04 is in the form of a project covering all eleven of the general units and all students are expected to submit this TMA, which is used for assessment purposes.

The final examination is of three hours' duration.

There is no summer-school requirement. Tuition is arranged on a regional basis and normally takes the form of day-schools plus half-day or evening tutorials.

Broadcasting

There will be eleven television programmes, one programme associated with each of the general units. There will be eleven radio programmes; the first of these will be of a general introductory nature, the remainder will be directly integrated with the units for the special study areas.

Preparatory reading

Students wishing to undertake preparatory reading or to gain further insight as to the nature and material of the course are advised to read Kline *Mathematics in Western Culture*, one of the four set books, or some more general and elementary work such as Rogers *The Story of Mathematics*, Brockhampton Press or Popp, W. *History of Mathematics: Topics for Schools*, Transworld.

Set books

Boyer, C. B. *A History of Mathematics*, John Wiley.
Dedron, P. and Itard, J. *Mathematics and Mathematicians I and II*, trans. J. Field, Transworld.
Kline, M. *Mathematics in Western Culture*, Penguin.
Wilder, R. L. *Evolution of Mathematical Concepts*, Transworld.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

AMST283 SCIENCE AND BELIEF: FROM COPERNICUS TO DARWIN

This course is designed as a complement to AST281 *Science and the Rise of Technology Since 1800*. It is concerned with the intellectual, rather than the technological, implications of science. These are considered purely in their historical context, and the course is about one particular aspect of the history of science, namely the history of scientific ideas. Their changing impact upon western culture in general is discussed with particular (though not exclusive) reference to religious belief systems. The period chosen is the crucial one from Copernicus to Darwin; the great crises in human thought associated with these names provide the two main foci of the course.

Course structure

The course is arranged in six blocks:

I *Units 1–3 The 'Conflict Thesis' and Cosmology.* The 'conflict' between science and belief is analysed as a model for writing the history of science. Its limitations are exemplified in discussions of the 'Copernican transformation' and the dispute between Galileo and the Roman Catholic Church in the 16th and 17th centuries.

II *Units 4–5 Towards a Mechanistic Philosophy.* The philosophy of Descartes and Newton's theology of nature are set within the context of the developing mechanistic philosophy of the 17th and 18th centuries.

III *Units 6–8 Scientific Progress and Religious Dissent.* The scientific and technological achievements of Puritans in the 17th century and Nonconformists, Deists, and 'rationalists' in the 18th century are analysed in relation to the religious beliefs of these dissenting groups.

IV *Units 9–11 New Interactions between Theology and Natural Science.* The flowering of natural theology in 18th century Britain and the rise of historical geology in the 18th and 19th centuries are interpreted as expressions of diverse theologies of nature.

V *Units 12–14 The Crisis of Evolution.* Darwin's achievement is distinguished within the history of evolutionary thought and its impact on religious belief is compared with that of the 19th century 'revolution' in historical thinking.

VI *Units 15–16 The New Outlook for Science.* The relation between nature and history and the religious response to the Darwinian 'challenge' are viewed with reference to their implications for the future of science and belief.

Prerequisites

Some of the issues in the course may be unfamiliar to twentieth-century minds, and for that reason students should have a sympathetic attitude to the past and to a historical approach generally. Detailed knowledge of theology or philosophy is not necessary but there should be a willingness to give serious attention to the theological questions raised by the development of science.

For this course no prior mathematical expertise is assumed nor is an extensive knowledge of any other science. However, a general awareness of scientific attitudes will be helpful. There are no previous courses specifically recommended.

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Broadcasts

One of the principal aims of the eleven television programmes will be to expound the scientific issues at stake. There will also be eleven radio broadcasts, chiefly given by distinguished contributors from other universities.

Assessment

There are four tutor-marked assignments associated with this course. The final examination is of three hours' duration.

Preparatory reading

For those who wish to acquaint themselves in advance with subjects treated in the course, the following preparatory reading is suggested: Dillenberger, J. (1961) *Protestant Thought and Natural Science;* Barbour, I. (1966) *Issues in Science and Religion.*

Set books

Gillispie, C. C. *Genesis and Geology*, Harper & Row.

Goodman, D. C. (ed) *Science and Religious Belief 1600–1900: A Selection of Primary Sources*, John Wright & Sons (Course Reader).

Hooykaas, R. *Religion and the Rise of Modern Science*, Scottish Academic Press/Chatto and Windus.

Russell, C. (ed) *Science and Religious Belief: a Selection of Recent Historical Studies*, University of London Press (Course Reader).

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

AST281 SCIENCE AND THE RISE OF TECHNOLOGY SINCE 1800

This course, which has no prerequisites, is intended for all students interested in the rise of our modern technological society: those whose interests lie in the humanities (especially history) as well as scientists and technologists. The basic aim is to understand how important science has been in our fairly recent history. This, perhaps, is the ultimate justification for a study of the history of science.

Taking as an arbitrary starting point the year 1800 it studies the main developments in science and technology in so far as these interacted substantially with each other. There is a discussion of the formative ideas in physical science leading to an account of their overspill into the chemical and engineering industries of the last century. The organization of science in England, problems of scientific communication, nationalistic trends in science and the social implications of science and technology are included in the course.

Course structure

The units are bound together in blocks as follows:

Units 1–3	The Historical Perspective
Unit 4	Coal
Units 5–7	Atoms and Electricity
Units 8–9	Scientific Organization and Communication
Unit 10	Public Health
Units 11–13	The New Chemical Industry
Units 14–15	Science and Engineering
Units 16–17	The Wider Issues

Broadcasts

In addition to being an inter-disciplinary course this one is very much a multi-media one, and *all* components are necessary for a complete appreciation and understanding.

With three exceptions, the eleven radio programmes are illustrated talks by distinguished historians of science and technology from other institutions. They are intended as integral parts of the course, providing exposure to the ideas of leading scholars in this country.

The eleven television programmes constitute a series which, although necessary to an understanding of the units, is nevertheless intended to be self-contained within itself. As well as providing general supportive material for the units, they give visual demonstrations of specific scientific experiments or technological processes, and provide archival records of industrial processes or plant of historical importance.

Assessment

There are four tutor-marked and four computer-marked assignments, and three of each are used for assessment.

Preparatory reading

For students who wish to do some preparatory reading, the set book by Derry and Williams, *A Short History of Technology* is recommended.

Set book

Ashton, T. S. *The Industrial Revolution 1760–1830*, Oxford University Press.

Cardwell, D. S. L. *The Organization of Science in England*, Heinemann Educational Books.

Chambers, J. D. *The Workshop of the World 1820–1880*, Oxford University Press.
Derry, T. K. and Williams, T. I. *A Short History of Technology*, Oxford University Press.
Goodman, D. C. and Russell, C. A. (eds) *Science and the Rise of Technology*, John Wright & Sons (Course Reader).
Williams, T. I. *The Chemical Industry*, E.P. Publishing.

Course begins: February 1979
Course ends: November 1979
Units of work: 17
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

D203 DECISION MAKING IN BRITAIN

Who makes the decisions that matter in Britain? How are they made, at what levels, under what constraints, and how are they influenced by the contexts in which they occur? How far are changes or developments the result of decisions that are consciously made? What is the importance, if any, of negative decisions and of decisions not to decide? What indeed are the criteria of importance when discussing decisions that matter in Britain?

These questions give an idea of the course objectives which include knowing what is involved in making decisions and understanding some characteristic features of decision-making processes. The structure of the course is based on a designation of certain sectors or particular areas of activity in our society which are associated with some sphere of government. Of the seven blocks in the course, five are concerned with:

Public Order – the Courts, the Police, Judicial and Police Behaviour.

Government and Industry – Government intervention in Industry, The National Enterprise Board, planning agreements with Industry, investment decisions, workers' participation in management decisions, multi-national corporations.

Agriculture – agricultural decision-making in Britain and the EEC, farming politics and the National Farmers' Union.

Foreign Policy – How much choice have foreign policy makers? 'Perception' in foreign policy, the Oil Crisis of 1974.

Pollution Control – The evolution of control standards, the price of amenity, public participation and the integration of environmental policies.

You will be helped to gain some familiarity with British governmental institutions, social relationships and the economy in recent British history. Equipped with this knowledge, you will then be encouraged to consider particular models of the decision-making process and particular models of the distribution of decision-making power in an attempt to make clearer the problems people are seeking to solve through their decisions or policies, and what may be the formal and informal structures in or through which they are working out those solutions.

The course is not the preserve of a single discipline. Political scientists contribute, since power, its location and its exercise, is integral to the course. But other specialists contribute too, in particular economists and lawyers, with assistance from sociologists and social psychologists. There are of course sectors of decision making to which no attention is given in D203. Education, for instance, is a sector dealt with by E221 *Decision Making in British Education Systems* (which is not yet available in the associate student programme), while the broader field of environmental services is covered by PT272 *Environmental Control and Public Health*. So the course does not enable you to answer conclusively all the relevant questions, nor to obtain a comprehensive picture of British society. Nevertheless, many thought-provoking issues are raised and discussion of these is seen as central to the course. In addition, this course will stimulate and accustom you to a critical study of your sources (including the D203 course material itself). And, not least important, it provides the opportunity, through a student exercise centred around the currently favoured idea of worker-participation, both to obtain some basic insight into the conditions necessary for research and to develop the skills of enquiry and comprehension.

D203 is designed for students, whether or not they intend to concentrate on the social sciences, including Government, who consider an empirical understanding of the broad social framework of their lives important.

There are 32 radio programmes and 16 television programmes. Continuous assessment consists of the best eight out of ten tutor-marked assignments. There will be five computer-marked assignments for which grades and model answers will be given but which will not be part of continuous assessment. There is a final examination of three hours' duration.

Set books

Attenborough, K., Pollitt, C. and Porteous, A. (eds) *Pollution: The Professionals and the Public*, Open University Press.
Barber, J. P. *Who makes British Foreign Policy?* Open University Press.
Castles, F. G., Murray, D. J., Pollitt, C. and Potter, D. C. (eds) *Decisions, Organizations and Society*,

Penguin (Course Reader) (2nd edition, not 2nd impression).
Hanson, A. H., and Walles, M. *Governing Britain* (revised edition), Fontana.
Skuse, A. *Government Intervention and Industrial Policy*, Heinemann Educational Books.
Young, S. with Lowe, A. V. *Intervention in the Mixed Economy*, Croom Helm.

Course begins: February 1979
Course ends: November 1979
Units of work: 32
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £100
Application period: 3 April–10 October 1978

D204 FUNDAMENTALS OF HUMAN GEOGRAPHY

Fundamentals of Human Geography will be of interest to those from a wide variety of backgrounds who wish to take a basic introductory course in geography. It may therefore appeal particularly to those working in government at national or local levels, to planners and architects and to teachers of geography in various branches of higher education. Since it is a basic course, there are no specific prerequisites, nor would background knowledge of the subject be required.

The course itself progresses from a very basic level to the upper end of a university second level course, and so covers a considerable amount of ground. It is divided into three parts.

First, 'Man and Environment' which looks at such matters as the effect of environment on man and, of more significance, his modification of it. Man-environment relationships are examined as complex interrelated systems, the sophisticated analysis of which is a central concern of geographers today. However, the development of geographical thought in respect of the study of man and the environment is looked at, beginning with the emergence of the school of determinism. In parallel with the course structure and as part of it, we develop a whole range of fundamental geographical skills which we feel are appropriate to a second level course. For example, we use the material in this section to teach some statistical cartography and map-work and introduce preparatory material for teaching analytical statistics. We try to increase sensitivity to the spatial dimension of situations and put considerable emphasis on learning how to evaluate geographical work.

The second part of this course deals with 'Spatial Analysis', an approach to the study of geography which allows the reduction of the complexity of man-environment relations by adopting an abstract stance. Spatial patterns are taken as the basic problem and deductive explanations sought in terms of the processes at work. Here we further develop the use of simple analytical statistics and the principles of using models in geography. We also encourage practice of the skill of synthesis.

The third part of the course, entitled 'Values, Relevance and Policy', has three central themes. It suggests that geography is undergoing a shift from normative theory towards greater concern for 'relevance' and socio-spatial justice; that theories and concepts are not intrinsic to the real world but a means by which geographers structure it; and that there are alternative ways of explaining spatial phenomena which depend on the dominant paradigm within which the geographer works. In this section we look at the principles of prediction and attempt to strengthen the student's ability to evaluate the work of the human geographer in differing ideological contexts.

The aims of the course are to describe and evaluate:
1 The traditional preoccupation of human geographers with explaining man's behaviour in relation to his environment and the way in which this has changed with the evolution of geographical thought;
2 the recent interpretation of the man-environment relationship in terms of complex human ecosystems and spatial patterns and the way in which the processes implicit in both concepts may now be identified, using analytical techniques;
3 the way in which geographers utilize their skills in formulating socially relevant policies which may reflect the personal beliefs and values and the ideological framework within which they operate.

It is hoped that as a result of studying this course, the student will be able to:
(a) feel confident he has grasped the fundamentals of human geography and be able to decide if he wants to study further, more specialized courses;
(b) describe how the subject has developed and the current concerns of human geographers;
(c) read and use the terminology of human geography;
(d) describe and justify the different kinds of explanation used in human geography;
(e) make a sensible choice of sources of information for the subject;
(f) use all the basic techniques of human geography, e.g. simple description, cartographic and analytical statistics, social surveys and maps;
(g) explain the basic concepts and principles of the subject and apply these to any geographical distribution.

Sixteen hours of tutorials are provided by our regional staff, some of which may be taken up by regional day schools rather than all as 1½ or 2 hour evening tutorials in local small groups. In addition

there is a summer school aimed at introducing the students to the principles of social scientific enquiry through practical project work in the field and in the laboratory. During the summer school students are introduced to the use of the computer for the processing of data collected in the field.

This course is an upgraded remake of the half-credit course D281 *New Trends in Geography* which has previously been available in the associate student programme. Associate students who may wish to transfer a credit for D204 to the undergraduate programme should note that because of the similarity of content between the section of D204 dealing with spatial analysis and D281, students will not be allowed to offer both courses for credit towards their degree.

Broadcasts

As well as sixteen television and eleven radio broadcasts, there is an additional programme mailed to the students on a gramophone record. These are accompanied by a broadcast handbook which provides preparatory work and exercises to help students follow up the programmes and integrate them with the correspondence texts. Since the broadcasts and the records carry additional parts of the teaching materials rather than parallel the unit texts, viewing and listening are essential for the course and accordingly will be assessed. Students are therefore advised to think very carefully about taking this course unless they are able to watch and listen to programmes on a regular basis.

Assessment

Broadcast assessment will be part of the complement of eight tutor-marked assignments and eight computer-marked assignments set for D204. From these, the best six responses will, in each case, be selected as a continuous assessment contribution towards a final course grading.

Set books

There are only three major set books prescribed for this course, though in the case of the books by Haggett and Chisholm students are not expected to study the complete texts. Guidance is given in the course units as to which sections of these should be read and when. The third volume, consisting of a selection of articles and papers, has been specially prepared by members of the course team. Again, instructions given in the course units will programme students through these additional readings. A further item which you are asked to purchase is an Ordnance Survey map. This is needed to accompany your studies of the first five radio programmes. The books are as follows:

Blunden, J. R., Haggett, P., Hamnett, C., and Sarre, P. (eds) *Fundamentals of Human Geography*, Harper and Row

Chisholm, M. *Human Geography: Evolution or Revolution*, Penguin.

Haggett, P. *Geography: A Modern Synthesis*, (2nd edn), Harper and Row.

Ordnance Survey *One Inch Tourist Map of Dartmoor.*

Course begins: February 1979
Course ends: November 1979
Units of work: 32
Course level: Second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £100 (excluding the summer school fee)
Application period: 3 April–10 October 1978

D301 HISTORICAL DATA AND THE SOCIAL SCIENCES

Population problems, voting behaviour, the analysis of economic change or social mobility are typically the concern of the social scientist. Usually he studies them using contemporary materials, unaware of the existence or relevance of much primary historical data. This course aims to add to the social scientist's analysis of these and similar problems, the hitherto under exploited historical dimension.

It is hoped that the course will attract social scientists seeking to test their findings on other than contemporary materials; historians, eager to learn something of social science and the ways in which it can extend their understanding of the past; and teachers of both history and the social sciences, looking for ways of involving their classes in the systematic analysis of local historical data, and of introducing project work with a social science flavour. The course may also be of interest to archivists wishing to investigate new approaches to the use of historical material, and to librarians, who have particular responsibility for local history.

The course owes a great deal to the interdisciplinary studies environment created at the Open University, for it attempts to synthesize three distinct intellectual orientations – the quantitive, the theoretical and the literary subjective – into what has been called *Applied Historical Studies*. This term serves to describe explorations of the past which have the explicit purpose of advancing social scientific enquiries. The course depends heavily on recent developments which have had the effect of bringing historians closer to social science, social scientists closer to history and involved both in the application of quantitative techniques. As a student of the course you will be taught, during its first half, how to conduct the 'explorations' referred to above. In the second half you will 'explore'

on your own or with other students.

During the first fifteen weeks of the course you will cover a range of materials and problems in historical demography, historical psephology (these are mostly confined to voting at British parliamentary elections in the period 1832–72) and historical sociology. Various elementary quantitative techniques suited to the analysis of historical data are taught. Potential students need have little fear of these, as the teaching methods are designed to meet the needs of the most abjectly innumerate! Indeed the excellence of this part of the course has been recognized by the Social Science Research Council. The Council has 'adopted' the course and from 1979 is to pay the fees of all those to whom it has awarded a studentship for research in economic and social history, so that they may take it.

During the last seventeen weeks of the course you will devote most of your time to a project based on locally available historical data. This is designed to let you practice the skills acquired in the first part of the course. This project does *not* lead to a thesis to be presented at the end of the course. Instead you will be asked to submit four reports in the form of tutor-marked assignments at approximately monthly intervals. These cover the various stages of the project from choosing a topic, assessing sources and discussing methods to the presentation and appraisal of the findings. The difference between these last four assignments and the four you are asked to complete during the first part of the course, is that whilst the latter are based upon material provided for you, the former are based upon material you yourself have found from local libraries, archives, record offices or indeed from any of the multitude of places which hold historical records.

Throughout the course you will be able to use the University's Student Computing Service to help with any statistical work you may wish to do. It is likely that day schools will be arranged and although attendance at these is not essential, it is strongly recommended.

There are no specific requirements for this course, though it is assumed that anyone taking it has an interest in exploring locally available historical data and in employing new methods to do so. There are several other courses in the associate student programme which, in one way or another, complement this one. These are A202 *The Age of Revolutions*, A301 *War and Society*, E341 *Methods of Educational Enquiry*, MDT241 *Statistics: an Interdisciplinary Approach*, or any courses in politics, economics, sociology or history.

It is regretted that students with a severe visual or mobility handicap would have considerable difficulties in following this course, unless they had access to some appropriate historical material without having to visit a local archive.

Assessment

The assessment or the course consists of eight tutor-marked assignments, of which the best six will be used for continuous assessment, and eight computer-marked assignments, of which the best six will also be used for continuous assessment.

Broadcasts

No assignment is based directly on the broadcasting element (there are six television and six radio programmes) and the course could be completed successfully even if it were impossible to receive the broadcasts. Nevertheless useful and important material is available from them.

Preparatory reading

(The first four are in paperback)

Chambers, J. D. *Population, Economy and Society in Pre-Industrial England*, Oxford University Press

Foster, J. *Class Struggle and the Industrial Revolution: Early Industrial Capitalism in Three English Towns*, Methuen.

Glass, D. V. and Eversley, D. E. C. *Population in History*, Edward Arnold, Two volumes.

Laslett, P. *The World We Have Lost*, Methuen.

Nossiter, T. J. *Influence, Opinion and Political Idioms in Reformed England*, Harvester Press.

Set books

Drake, M. *Applied Historical Studies: an Introductory Reader*, Methuen/Open University Press.

Floud, R. *An Introduction to Quantitative Methods for Historians*, Methuen.

Course begins: February 1979
Course ends: November 1979
Units of work: 32
Course level: Third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £100
Application period: 3 April–10 October 1978

D302 PATTERNS OF INEQUALITY

Five goals have been established for this course:

1 To understand what the concept 'inequality' means, to be familiar with the various types and scales of inequality that exist today in the world, to understand why inequality is important, to be able to offer reasoned explanations of the processes that cause and maintain social inequalities, and to suggest and evaluate policies that can influence inequalities.

2 To recognize that the concept 'inequality' has both ideological and scientific content, that scientific explanation can provide the evidence upon which political action may be based and evaluated.
3 To understand the contribution of social science to the analysis of social problems and be able to use its techniques of analysis and synthesis in a systematic way.
4 To be able to think critically, constructively and creatively, to develop considerable powers of discrimination and evaluation. The student should establish and apply his own intellectual structure to the problems revealed in the course. He should be able to plan his own work and to carry on studying the social problems of inequality after the course is completed.
5 To apply what the student has learned of inequality and the skills of disciplined thinking to his own experience so that he is able to distinguish different perspectives and recognize the values implied in those perspectives.

In the contemporary world inequality is at the centre of many major debates. It is a subject of much political discussion. It is defended as the basis of competition, incentive and variety and attacked as the source of injustice and exploitation. Inequality is a concept of concern to social scientists who seek to measure and explain it. Inevitably questions of morality arise and the 'neutrality' of scientific inquiry is questioned.

In this course, patterns of inequality are treated as predominantly social phenomena that can be influenced by political action. Although inequality is a moral issue, the course itself is not concerned to make moral judgements, rather to expose the thinking on which debate is founded. Inequality is considered in terms of its primary dimensions – class status, and power – and the 'secondary' dimensions that depend on them such as housing, health and education. The course seeks to explain the nature and origin of inequality and the processes that sustain it. It also considers the political goals for maintaining or reducing inequalities and the means for implementing them. The course is divided into four sections:

Section I: What is inequality and why is it important? The objective nature of inequality and the subjective experience of it are defined. Inequality is treated as both an ideological and a philosophical concept. Some of the theories which attempt to explain existing patterns of inequality and the conditions for social change are presented. Finally, personal inequality is distinguished from individual differences of sex, race or intelligence. These may be unavoidable but they can encourage assumptions that tend to reinforce existing patterns of inequality.

Section II: Inequalities within nations The primary dimensions of inequality are examined theoretically and empirically at the national level. Policies to modify inequalities in income, wealth, housing, justice, education, health and welfare have been introduced. Using the United Kingdom as the main example, each of these forms of inequality is described and analysed, and the outcomes of various policies evaluated. The case of South Africa, where forms of inequality have been institutionalized, provides a contrast in state ideology and policy.

Section III: Inequalities between nations Flows of aid, trade, investment and labour are the traditional ways of changing patterns of inequality between nations. Development theories differ in their explanations of the effect of these – some argue these flows can reduce economic disparities while others contend that they are responsible for a persistent pattern of exploitation by the rich over the developing nations. Opinions differ on the desirable directions of change and the examples of India and China are used to demonstrate alternative roads to development.

Section IV: Reform or Revolution? On the whole the course concentrates on reform as a strategy for change and in this section the wider issue of whether reform can secure fundamental changes in patterns of inequality or whether it is simply a process which supports the *status quo* is confronted. This is set against the nature of revolutionary change and its possible outcomes.

There is a substantial broadcasting component in the course; sixteen television programmes, eight of them at double length, and thirty-two radio programmes. These are used to present environments and interactions as a complement to the correspondence material and all broadcasts are fully integrated into the teaching system by means of media handbooks. Access to these broadcasts is, therefore, highly desirable.

Attention will be paid throughout the course to the development of five skills. These are analysis and criticism of source material, ability to evaluate alternative explanations and policies, formulation and testing of hypotheses, application of knowledge gained to the student's own experience, and ability to recognize the role of values including the student's influencing the assumptions and content of social scientific enquiry. Correspondence texts vary in presentation, some being units of exposition, others resource packages containing a variety of activities for students. The emphasis will be on 'active learning' e.g. using broadcasts, questions, practical exercises, collecting examples for a 'resource file'. There will be more face-to-face teaching than is normally attempted at this level and telephone teaching will be encouraged in those areas with scattered populations.

Although not designed as a vocational course, D302 is concerned with the concept of inequality, which underlies many of the issues being faced by those working in local government, the Civil Service and the caring professions, in that it is a fundamental theme in present day society.

There are nine tutor-marked assignments (TMAs)

associated with this course, but no computer-marked assignments. One of these TMAs is a 'floating' one, and can be undertaken at any point in the course. In addition, there is a double TMA which accounts for two of the remaining eight TMAs. This is associated with a case study of inequality in China and India, where students are asked to formulate a hypothesis themselves, and develop an argument around it. Of the nine TMAs in the continuous assessment only *six* have to be completed for the final, overall assessment.

The set book by Tawney, R. H. (1964) *Equality* would be useful preparatory reading.

Set books

Atkinson, A. B. *The Economics of Inequality*, Open University Press.

Blowers, A. T. and Thompson, G. *Inequality, Conflict and Change*, Open University Press (Course Reader).

Kincaid, J. C. *Poverty and Equality in Britain*, Penguin.

Marx, K. and Engels, F. *Selected Works*, Lawrence and Wishart.

Miliband, R. *The State of Capitalist Society*, Quartet Books.

Parkin, F. *Class, Inequality and Political Order*, Paladin (Granada).

Schiavo-Campo, S. and Singer, H. *Perspective of Economic Development*, Houghton Mifflin (Eurospan).

Tawney, R. H. *Equality*, Allen and Unwin.

Course begins: February 1979
Course ends: November 1979
Units of work: 32
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £100
Application period: 3 April–10 October 1978

D305 SOCIAL PSYCHOLOGY

The primary purpose of this course is to provide insight into social behaviour and experience. Whilst drawing on relevant data and ideas from a number of related disciplines, the essential focus is on the theories, findings and methods of social psychology.

The course consists of fifteen blocks which vary from one to four weeks' work. The course begins with a discussion of theoretical and methodological issues. It then explores the genetic and evolutionary bases of human social behaviour, including those of language. To counterbalance this emphasis, the course then examines the societal context of behaviour and experience. The next three blocks focus on the processes involved in socialization from a number of different theoretical perspectives – those of social learning, cognitive-developmental and psychodynamic theories. The course then moves on to explore the adult functioning in his society, beginning with how he perceives, interprets and makes sense of his experience of the world. Other topics discussed are the development, function and change of attitudes and their relationship to personality and behaviour; verbal and non-verbal communication; social interaction; group membership and inter-group conflict and, finally, the effects of deliberate attempts to persuade and manipulate. The last block reviews and attempts to integrate the wide diversity of material in the course. It also contains a discussion on psychological images of man and the nature of social psychological understanding. The block concludes with a consideration of the value of psychology to society and the individual.

There are three projects associated with the course and the student is expected to carry out at least one of these. The projects are intended to provide an opportunity to appreciate the problems involved in research at first hand and they should also increase the student's understanding of the theories and findings contained in the course. All projects can be done by the house-bound student. One of the projects requires either access to a study centre with a computer terminal or use of the Student Computing Service postal service.

There are eight tutor-marked assignments associated with this course of which the best five together with the marks on one project will count for continuous assessment. The final examination is of three hours' duration.

There are 16 radio programmes and 16 television programmes.

This is a broad-based course and is designed not only for those students interested in psychology, but also for sociologists, other social scientists such as those in the caring professions, political theorists, and others with an interest in increasing their understanding of social behaviour and experience. No specific knowledge or background is assumed.

This course is one of seven which form part of a BA honours degree recognized by the British Psychological Society as the equivalent of a university honours degree in psychology for the purposes of graduate membership of the Society.

Another course in the associate student programme which might be considered as related to D305 is SDT286 *Biological Bases of Behaviour*.

Set books

Argyle, M. *Social Encounters*, Penguin.

Berger, P. L., Berger, B. and Kellner, H. *The Homeless Mind*, Penguin.

Berger, P. L. and Luckmann, T. *The Social Construction of Reality*, Penguin.

Brown, H. and Stevens, R. (eds) *Social Behaviour and Experience: Multiple Perspectives*, Hodder and Stoughton Educational/Open University Press (Course Reader).
Davis, J. H. *Group Performance*, Addison-Wesley.
Erikson, E. H. *Childhood and Society*, Penguin.
Warren, N. and Jahoda, M. (eds) *Attitudes*, 2nd edn, Penguin.
Wright, D. *The Psychology of Moral Behaviour*, Penguin.

Course begins: February 1979
Course ends: November 1979
Units of work: 32
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £100
Application period: 3 April–10 October 1978

D332 INTERNATIONAL POLITICS AND FOREIGN POLICY

The aim of this course is to introduce students to the problems of international politics, and to the ways in which they can be tackled by reconciling theoretical approaches with practice. The course may be considered to be of particular interest to those in business, the armed forces and government service.

The course has three main elements: an introduction to foreign policy analysis; a study of conflict and co-operation between states and other groups; and an appraisal of general attempts at the explanation of international politics.

In Block 1 (The analysis of international politics) the aim is to identify the subject-matter and to initiate enquiry into some of the problems it poses, e.g. the best way to explain what happens in international politics.

Blocks 2 (Foreign policy: the setting), and 3 (Foreign policy: policymaking and implementation) focus on the most important groups active in international politics – the states and their governments. What influences feed into foreign policymaking, and how are they translated into decisions and orientations? What resources do states possess and how are they constrained in the pursuit of their policies? In each block, these and similar questions are first discussed in theoretical terms and then pursued in case studies which allow a comparison between theory and reality.

Block 4 (Politics between states: conflict and co-operation) shifts the level of analysis to that of interaction between states and other groupings, with a basic division between conflict and co-operation. How does conflict arise in the international arena, what is distinctive about it, and what techniques are available for its control or resolution? What modes of co-operation can be distinguished in international politics and what chances are there that they may undermine the supremacy of the nation-state? What are the causes of war? Again, extensive use is made of contemporary theory and case study material.

Block 5 (Theory and policy in international politics) concludes the course by reappraising some of the general theories which have been advanced to explain the nature of international policy, by examining recent approaches to a study of 'world society' and by asking how far theories of international politics can be of use to a practitioner.

Students may choose, as part of their assignment work, to write a longer essay relating an aspect of British foreign policy to a theoretical proposition chosen from the course text or set reading. There is a wide range of choice and students have the opportunity to pursue their own particular interests.

The television component is devoted to a detailed study of the Arab/Israeli dispute. It does not provide a detailed history of the dispute but again seeks the reconciliation of theory and practice, by applying theoretical propositions to actual events in the Middle East.

The radio element is more varied, but in general it aims to expand the discussion of issues which arise either from the set reading or from the television programmes. There are sixteen radio programmes and eight television programmes.

This is a third level course, and students should have a grounding in Politics either from experience or from formal study.

Five tutor-marked assignments and three computer-marked assignments form the basis of continuous assessment. The final examination is of three hours' duration.

Students wishing to familiarize themselves in advance with the types of materials contained in the course are recommended to read: Wallace, W. (1971) *Foreign Policy and the Political Process*, Macmillan; Deutsch, K. W. (1968) *The Analysis of International Relations*, Prentice-Hall International or Reynolds, P. A. (1971) *An Introduction to International Relations*.

Set books

Barber, J. and Smith, M. (eds) *The Nature of Foreign Policy: a Reader*, Holmes McDougall (Course Reader).
Burton, J. *World Society*, Cambridge University Press.
Holsti, K. J. *International Politics a Framework for Analysis*, Prentice-Hall International.
Waltz, K. *Man, the State and War*, Columbia University Press.

The books by Burton and Waltz need not be bought until half way through the course.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third

Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

DE206 SOCIAL WORK, COMMUNITY WORK AND SOCIETY

The principal aim of this course is to describe and analyse the ideological and theoretical premises, the techniques used and the outcomes achieved, in the field of social work and community work practice. This is complemented by a general study of the role and nature of the welfare state in contemporary British society. The course should be of interest to anyone working in the personal social services, and would be useful to anyone wanting an introduction to the provision of social welfare in Britain.

Studying the course should enable the student to:
1 relate the social and historical origins of welfare to the contemporary social functions of social and community work;
2 be familiar with contemporary social work and community work practices;
3 understand the theoretical underpinnings of social and community work practice;
4 evaluate the role and function of contemporary social and community work as one element of the welfare state;
5 discuss the nature and implications of the political, psychological and sociological debates surrounding contemporary welfare provisions;
6 situate contemporary debates within their ideological and philosophical traditions.

Outline of the course

Unit 1 The concept of a 'social problem'.
Unit 2 Social policy and social welfare.
Units 3–4 Historical background to social and community work (SCW) and the welfare state.
Unit 5 The social work agency.
Unit 6 The law and SCW.
Units 7–9 Psychological and sociological theories of social problems.
Units 10–14 Social work in practice: client perspectives, advocacy, casework, counselling, groupwork, residential care, and their social and political context.
Units 15–19 Community work in practice: a case study of community work in Liverpool: community action, neighbourhood projects group, community education, welfare and legal rights projects.
Unit 20 The personal and the political.
Units 21–25 The role and function of SCW in relation to the areas of education, juveniles and justice, race, health, and psychiatry.
Units 26–29 Professional and non-professional roles in SCW.
Unit 30 Challenges to the SCW role; client resistance.
Unit 31 The economics of SCW services.
Unit 32 Future prospects for SCW.

There are no specific requirements for this course, but some knowledge of the social sciences is assumed, and would be a useful background for anyone taking the course. The following courses, which are also available in the associate student programme, are complementary and relevant: PD251 *The Handicapped Person in the Community;* D203 *Decision Making in Britain;* DE351 *People and Work;* D302 *Patterns of Inequality;* E361 *Education and the Urban Environment.*

Preparatory reading

It would be advisable for students to read through the set book by Titmuss in the list below before beginning the course, and to try to consult Eric Sainsbury *The Personal Social Services*, Pitman, for an introduction to social welfare.

Assessment

The assessment for the course consists of eight tutor-marked assignments, of which six will be used for continuous assessment. The final examination is of three hours' duration.

Broadcasts

There are sixteen television programmes and eighteen radio programmes. The broadcasting element will be integrated into the course, to illustrate visually and verbally, the role of social and community workers.

Set books

Family Welfare Association *Guide to the Social Services* (current edn), McDonald and Evans.
Fitzgerald, M. et al, *Welfare in Action*, Routledge and Kegan Paul (Course Reader).
Halmos, P. *The Faith of the Counsellors* (reprinted 1978), Constable.
Jordan, B. *Poor Parents*, Routledge and Kegan Paul.
Konrad, G. *The Caseworker*, Hutchinson.
Parker, H. *View from the Boys*, David & Charles.
Pearson, G. *The Deviant Imagination*, Macmillan.
Titmuss, R. *Social Policy*. Allen & Unwin.

Course begins: February 1979
Course ends: November 1979
Units of work: 32
Course level: Second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £100
Application period: 3 April–10 October 1978

DE351 PEOPLE AND WORK

This course is intended to introduce students to the main elements and themes of the sociology of work in such a way as to increase their knowledge of sociology and of their own work careers and experience. The main focus of the course is on the relationship between social and political structures and work experiences and cultures.

Approach of the course

The sociology of work not only constitutes an important area of theoretical, conceptual and substantive discourse (and one which is acknowledged as such by the major sociological theorists); it also deals with a crucially important social and philosophical issue; the relationship between people and their work and the relationship between types of work and political and social structures.

The course eschews normal sociological orthodoxies in a number of ways: first it covers topics from both industrial sociology and the sociology of occupations, areas that are often considered as discrete theoretical and substantive fields. Second the course adopts a clear and overt theoretical slant by considering occupations in the light of two theoretical perspectives: the marxist, structural perspective and the sociology of knowledge. The former involves considering occupations in terms of their location within society, the factors leading to the development of occupational (or class) consciousness, occupations as interest groups, the relationship between work – or involvement in the productive process – and consciousness, the utility of the concept of alienation and so on. The sociology of knowledge perspective proves useful in analysing occupations as creators and purveyors of ideologies which assert the occupation's interests under various guises. It will be argued that professions differ from other occupations mainly in their success in disseminating a particular highly advantageous view of the world and the place of the occupation in it, throughout the society. Professions are different because they are seen as professions. Attention is also paid to the role of occupations as purveyers of reality to their own members: as socializing agencies wherein members, once committed, develop a view of themselves and a 'career'. Finally the course views occupations in terms of their relationship to overall processes of of social change and differentiation.

These approaches are adopted in analyses of particular occupations in this country. Throughout the course students will be asked to look beyond the usual ways of classifying and categorizing occupations (such as professional, manual, criminal, artistic, intellectual, skilled, etc.), and to consider anew the sorts of similarities and differences that are apparent. For example it is possible to see occupations as more or less successful at promoting their occupational ideologies, or in terms of those which involve dealing with sacred or profane matters, or those that involve 'dirty' work and so on.

Course structure

The unit structure of the course focuses on the application of the theoretical perspectives outlined above to particular occupations. More specifically, the course structure is planned to cover the following topics:

Block 1 Work and Society This block considers the societal contexts with which in the work experiences, events and structures described in the rest of the course occur. This requires a discussion of the nature of industrial, capitalist and socialist societies and economies, and of their similarities and differences. This block contains material on some of the most interesting and useful concepts, theories and insights which can be applied to the sociological study of work and which have been supplied by early sociologists, such as Marx, Weber, Durkheim, etc., and more recent writers. The block relates these concepts and insights to empirical material in the set books and to later sections of the course.

Block 2 Occupational Structure and Placement This block contains material on the occupational structure of industrial societies as it affects the total work experience and also aspects of occupational mobility. Some discussion of change over time is included. The block is also concerned with the processes whereby people are placed in jobs and the mechanisms utilized in 'guiding' individuals – especially school-leavers – into appropriate sorts of work.

Block 3 Occupational Categories and Cultures This block considers work as a basis for work cultures and constructions of reality. It looks at the way in which work activities and organizations relate to structures of knowledge about work, colleagues, clients and society. It thus contains material on work and class consciousness, as well as discussion of the varieties of meanings that can be attached to work, and their origins and significance, and the ways in which different sorts of work are defined and evaluated generally.

Block 4 Politics of Work and Occupation This block considers the politics of work and occupation with reference to two issues: the role of trade unions in managing, institutionalizing or displaying conflicts between employees and employers, and the control implications of systems of knowledge and evaluation held and propagated by various occupational groups. This latter issue leads to an investigation of professions in general and a selection of diagnostic professions for examination in particular. It is also reflected in a consideration of management ideologies.

Prerequisites and preparatory reading

Some previous knowledge of sociology is an advantage. The course will be of interest to anyone who has had some previous work experience, and of particular interest to anyone professionally concerned with the organization of work, e.g. personnel managers, trade unionists, career counsellors. Students who wish to prepare themselves for the course should read Beynon (1975) *Working for Ford*.

Broadcasts

The eleven television programmes are used to present empirical material which students are asked to analyse and interpret in the light of the written components of the course. The sixteen radio programmes are used for two purposes: some extend and deepen the case studies portrayed in the television programmes; others consist of interviews with some of the main contributors to the course.

Assessment

Four tutor-marked assignments will be set, three of which will count towards final assessment.

Set books

Beynon, H. *Working for Ford*, EP Publishers Ltd.
Dalton, G. *Economic Systems and Society*, Penguin.
Dennis, N., Henriques, F. and Slaughter, C. *Coal is Our Life*, Tavistock Publications.
Esland, G., Salaman, G. and Speakman, M. (eds) *People and Work*, Holmes McDougall/The Open University Press (Course Reader).
Freidson, E. *Profession of Medicine*, Dodd Mead/TABS.
Weir, D. (ed) *Men and Work in Modern Britain*, Fontana.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

E203 CURRICULUM DESIGN AND DEVELOPMENT

Schooling is of obvious importance to parents, children, teachers and politicians. It is also of considerable social significance as the continuing national debate illustrates. This course attempts to bring order into the large number of issues raised by a consideration of the school curriculum.

We hope that the course will prove interesting to all those interested in social institutions and education. Every effort will be made to ensure that students without a professional interest are not placed at a disadvantage.

I Perspectives on the curriculum

Curriculum development involves certain, often unconscious, assumptions about, among other things, the aims of education, human development, the nature of knowledge and the relationship of schools to other institutions in society. The first block will examine various viewpoints in each of these areas and consider their impact on the curriculum. We shall study two examples of curriculum development, one a British attempt that has met with a mixed reception; the other is recent educational changes in Tanzania under Julius Nyerere. Students will be asked to examine the assumptions which appear to underlie some recent changes in British primary education.

II Curriculum design

The section is divided into two areas:

(*a*) *the whole curriculum* In determining the basic pattern of the curriculum, schools have to adjudicate between various competing ideals, claims and pressures. The course sets out, through worked examples, some important considerations involved in curriculum making and examines in detail the arguments for 'subject', 'activity' and 'topic' modes of teaching.

(*b*) *design issues* Our main themes here are 'reason, intuition and artistry'. What are the benefits and limitations of different approaches to planning? What is the role of intuition and artistry in curriculum planning? What do we mean when we talk about 'evaluating' the curriculum and how should schools justify their curriculum?

III Curriculum innovation

Here we look at the difficulties of introducing and supporting innovation. This block will include a study of the role of various agencies at national and local level, and the effectiveness of different strategies of implementing change. Considerable attention will be paid to the role of the school and of the individual teacher in innovation. European and American experience will be drawn on as well as recent United Kingdom experience. The influence of non-professionals such as governors and parents is also investigated.

Course assignments

The course will be organized around four major assignments, three of which will be counted towards final assessment. Each of these may be tackled in two stages and students will be encouraged to send in their work at an early stage to their course tutors to obtain advice and encouragement before submitting their finished assignment for assessment. Students will also

be encouraged to discuss with their course tutors the particular interpretation of the assignments which most adequately reflects their needs and interests.

The assignments attempt to draw on personal experience. However, realising that many students may not have access to details of a school as a parent or not wish to deal with their own school, say, as a teacher, the course team have put together a variety of case studies. These provide for the course authors, students and tutors a common experience on which the concepts of the course can be illustrated and challenged. The case studies are presented by means of printed material, including photographs and illustrations, and broadcasts.

The course is intended as an introduction to curriculum design and development; there are no prerequisites. Some of the themes will be pursued in greater depth in other educational courses.

The broadcasts form an integral part of the course and it would be unwise to choose it if you cannot receive the programmes. There are twenty-four radio programmes and sixteen television programmes.

Excluded combination

Because of similarity of content, this course, which replaces E283 *The Curriculum: Context, Design and Development* (a half-credit course available from 1972 until 1975), will be an excluded combination with that course. You may not complete both courses for credit towards your degree in the event of your registration in the undergraduate programme.

The four double-length tutor-marked assignments form the basis of continuous assessment. The final examination is of three hours' duration.

Set books

Golby, M., Greenwald, J. and West, R. (eds) *Curriculum Design*, Croom Helm Ltd (Course Reader).

Harris, A., Lawn, M. and Prescott, W. (eds) *Curriculum Innovation*, Croom Helm Ltd (Course Reader).

Lawton, D. *Social Change, Educational Theory and Curriculum Planning*, University of London Press.

Mackenzie, R. F. *State School*, Penguin.

Shipman, M. D. *Inside a Curriculum Project*, Methuen.

Stenhouse, L. *Introduction to Curriculum Research and Development*, Heinemann Educational Books.

Course begins February 1979
Course ends: November 1979
Units of work: 32
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £100
Application period: 3 April–10 October 1978

E222 THE CONTROL OF EDUCATION IN BRITAIN

This course will be concerned with analysing and discussing some of the basic questions that are continually being asked about the organization and control of education in Britain, and with finding answers to them. Who, for example, determines what is to be taught? How are standards set and controlled? Who decides how schools and other educational institutions are to be organized? Who settles how much money is to be raised to pay for education, where does the money come from, and who is accountable for the way it is spent? Who, in short, really controls the formulation, determination and execution of educational policies in Britain? How is power distributed between Parliament, the government of the day and their civil servants, the local education authorities and their officers, the schools and colleges and their teachers, and the parents themselves?

These are among the basic questions that the course covers in a way that requires no prior knowledge on the part of the student. You may have no more specific interest than that of the intelligent citizen who wants, through the systematic analysis and assessment of issues, to get a better grasp of the way one of the large public services is run. You may wish to prepare yourself to take a more active share in running the system – as a participant, perhaps, in the political arena, or as a member of a county education committee, a school governing body, or a parent-teacher association. You may already be a professional teacher, adviser, or administrator, but still want to set your daily task in a wider context for intellectual or vocational motives, or both.

Course content

Unit 1 introduces you to the main participants and bodies involved in the British educational systems, raises for initial discussion some of the key features of these systems and presents a framework for viewing the course as a whole.

Unit 2 examines the role of the Department of Education and Science and the extent of its impact on the educational system in England and Wales. It analyses the work of Ministers, officials and HM Inspectors. How are they organized? What controls do they use? Who are their clients? What is the process of policy-making? Is it effective?

Unit 3 compares the education systems of Scotland and Northern Ireland with that of England and Wales.

Unit 4 provides a general picture of the workings of local government since reorganization as it affects education, and this sets the scene for the more detailed treatment of specific points in the case study which follows.

Unit 5 indicates the general points discussed in unit 4 by focusing on a specific authority as its education committee and officials tackle problems of provision, budgeting and assessment of priorities. The unit follows the authority through the financial year, and examines the ways in which it accommodates to the educational expenditure cuts required by central government.

Unit 6 discusses the various pressure groups which are active in the education service. What tensions exist within them? How effective are they in influencing policy? A case study of the development of a major policy (the reorganization of secondary education) is considered in order to assess their impact.

Unit 7 deals with the financial role of the main bodies, including central government and the local education authorities, which distribute and employ funds for education, and with the main types of financial revenues, grants, mechanisms and controls involved.

Unit 8 examines the ways in which teachers are provided and deployed in the education system.

Unit 9 examines the range of instruments available to national and local government, directly or indirectly, to bring influence to bear upon curriculum and assessment procedures at each level of the educational ladder.

Units 10 and 11 explore the following questions concerning schools and offer a framework of analysis that can be deployed by layman or professional in order to locate and understand the running and practice of any particular school. Who runs the schools? Are they in fact controlled to the extent that one can infer similarities between schools of the same type whether in the primary, middle or secondary sectors? What recent developments in policy and practice are reflected in the running of the schools and what are the current directions of change which will affect or alter who controls the schools in the future?

Unit 12 describes school and college provision for the 16–19 year olds, and explores and evaluates several important questions concerning our present educational arrangements for this age group. Why, if the comprehensive principle is thought vital to compulsory schooling 5–16, is it not thought equally important for the further education sector post-16?

Unit 13 surveys the overall arrangements for advanced further education in Britain, describing the main types of institution involved and discussing the policy problems to which the division of the 'system' gives rise.

Unit 14 describes the structure of adult education as provided by local education authorities, universities, etc., and outlines the provision for job training as available through the Manpower Services Commission and its agencies. A final section reviews concepts and practice and, by postulating a system of recurrent education, attempts to find a framework that will accommodate officially provided adult education (a pursuit of leisure time) and training or retraining schemes that are increasingly essential in the work situation.

Unit 15 discusses some features of the running of education in selected countries outside the UK: the contrasts it points up are meant to illuminate the particular arrangements and processes studied in the previous units. In particular, it deals with the relationship of central and local government and the control of the curriculum in other countries.

Unit 16 attempts to draw out some of the main issues which have appeared in various guises during the course, and suggests answers to the basic questions underlying it. Ways in which students may take further their studies of the administration and management of education are suggested.

There are no prerequisites, and no prior knowledge on the part of the student is assumed. Other courses which are likely to be found relevant, and which are also available in the associate student programme are E321 *Management in Education* and D203 *Decision Making in Britain*. E222 replaces the course E221 *Decision Making in British Education Systems*. Since there is a considerable overlap of material between these courses anyone wishing to transfer credit gained for E222 to the undergraduate programme, and who has already completed E221, should note that these two courses are excluded combinations for credit purposes.

Assessment

Continuous assessment will be based on the three best of four tutor-marked assignments.

Broadcasts

There are eight television programmes and eleven radio programmes for this course.

Preparatory reading

No preparatory reading will be required, but for those who would like to acquaint themselves with some of the major elements of the British systems of education, the following pamphlets are recommended:

The Educational System of England and Wales, Department of Education and Science
The Educational System of Scotland, Scottish Education Department

Set book

Regan, D. E. *Local Government and Education*

At present only one set book is planned, but others may be included. The pamphlets mentioned above will be set reading and will also be provided to students with the appropriate units.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

E321 MANAGEMENT IN EDUCATION

This course is concerned with the management of educational institutions, and is likely to be of most interest to those working in schools and colleges or responsible for their government or control in a local education authority. It is also likely to be of interest to those working in other public service institutions.

The objectives of the course are to set out the area of decision analysis, organizational and behavioural theory and management sciences related to problems concerned with management in education.

At the beginning of the course the distinct features of management in education will be shown. The focus then moves to the school as an organization. A case study is presented to show how one large educational institution is being managed. The special characteristics of schools as organizations are then examined, after a review of the main lines of organization theory. This leads to the examination of the problem of managing major change and innovation in schools. The section concludes with a unit on Organization Development which is a type of participative decision-making.

The quantification aspects of management in education are then dealt with. This section covers management by objectives and associated issues. The costing and financing of education is then examined and is followed by curriculum planning and a discussion of the types of numerical models used in manpower planning for schools. The links between education and the socio-economic system are shown in the unit discussing decision-theory analysis.

The final section deals largely with behavioural aspects of management, and begins with a discussion of changes in the internal management of public sector colleges in further and higher education. This is followed by observations of human behaviour in educational institutions, drawing on models from climatology. The concept of role is examined, specifically that of the leadership role, and the whole matter of the individual and groups in the organization is discussed from a managerial standpoint. Finally, the rationale of resource allocation is discussed, showing how it is dependent upon economic variables, and how personnel in educational institutions are affected in sorting out priorities.

There are eleven radio programmes and eight television programmes associated with the course. These broadcasts form an integral part of the course and it would be unwise to choose it if you cannot receive them.

There are five tutor-marked assignments. The final examination is of three hours duration.

Set Books

Dobson, L., Gear, A. and Westoby, A. (eds) *Management in Education: Some Techniques and Systems*, Ward Lock Educational (Course Reader).

Hicks, H. G. *The Management of Organizations: a Systems and Human Resources Approach*, 2nd edn, McGraw Hill.

Houghton, V., McHugh, R. and Morgan, C. (eds) *Management in Education: The Management of Organizations and Individuals*, Ward Lock Educational (Course Reader).

Society of Education Officers *Management in the Education Service: Challenge and Response*, Routledge & Kegan Paul.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

E341 METHODS OF EDUCATIONAL ENQUIRY: AN EMPIRICAL APPROACH

The course has been devised for all those interested in educational development. Its purpose is to enable students to understand the aims and methods of educational research, to evaluate research critically and to appreciate its practical implications.

It is likely that the course will be of particular value

to school teachers; lecturers in colleges of education, institutions of further education and universities; educational psychologists and educational administrators.

Block 1 *The Nature of Educational Research* deals with the practical problems of carrying out educational research, the limitations of intuitive and subjective solutions and an overview of the areas of research which the remainder of the course will be treating in greater depth.

Block 2 *Research Design* considers the design and procedures employed in survey research (as distinct from experimental research dealt with in Block 5). It demonstrates the need for clearly defined and operational hypotheses derived from previous research and exploratory studies, as well as the importance of a good research design to test the hypotheses. It also demonstrates the need for representative sampling, the use of different sampling procedures and their associated limitations. Included in this is the evaluation of the sampling procedures used in reported research projects.

Block 3 *Data Collection* is concerned with the need for valid and reliable measurement of the variables used in research after a proper pilot study on the research population. It shows students how to employ different methods of data collection and deals with their associated problems. It also explains how to evaluate the methods of data collection used in reported research projects.

Block 4 *Data Analysis* brings together the different methods used for data analysis in educational research, how to describe data statistically, to analyse relationships between variables and to test hypotheses. It shows students how to interpret research findings in relation to the research problem and to evaluate the conclusions and inferences drawn in reported research projects. This block naturally covers an extensive field of analytic techniques used for research data.

Block 5 *Experiment in Educational Research* discusses the limitations of survey research in investigating causal hypotheses and the value for this of properly designed research experiments. It explains how to set up educational experiments, the different designs available, the limitations of each and the most appropriate methods to use for analysing the resulting data. It will enable students to interpret the results of educational experiments in the light of the original research problem and to evaluate the conclusions drawn from reported educational experiments.

Block 6 *Evaluation and Assessment of Educational Research* draws together the concepts of the course to enable students to evaluate educational and other research articles and to evaluate the conclusions and inferences drawn together with the implications the results have for educational policy and practice.

The student project plays a central role in the course providing the practical experience in data collection and analysis and reinforcing the lessons of the course itself. A battery of questionnaires is supplied concerned with 'attitudes to school' for administration to a group of about twenty-five school children. Arrangements for access to schools are made by Regional Offices. The Student Computing Service provides facilities to assist in the analysis of the data. Access to a computer terminal is available through regional study centres.

There are eight television and eleven radio programmes spread throughout the course. These elucidate and expand a number of concepts of the course.

Ten hours of tutorial time is available for meetings at study centres. Times are arranged by the Staff Tutors in the Regions.

Course E341 does not have a summer school, but occasional seminar days may be arranged for a sufficient number of students.

Course assessment is based on four tutor-marked assignments, four computer-marked assignments and a final three-hour examination.

A minimum of school algebra up to GCE 'O' level would be a useful but not an essential prerequisite for those taking the course.

This course is a recognised component for a degree in psychology leading to recognition for membership of the British Psychological Society. This should be of interest to any student wishing to qualify as an educational psychologist.

Preparatory reading

It is not essential for the student to do any preparatory reading for the course, but if he wishes to do so he is advised to read: Entwistle, N. J. and Nisbet, J. D. *Educational Research in Action* (set book); Nisbet, J. D. and Entwistle, N. J. (1970) *Educational Research Methods*, London University Press.

Set books

Entwistle, N. J. and Nisbet, J. D. *Educational Research in Action*, London University Press.

Fisher, G. H. *The New Form Statistical Tables*, London University Press.

Guilford, J. P. and Fruchter, B. *Fundamental Statistics in Psychology and Education*, 5th edn, McGraw-Hill.

Oppenheim, A. N. *Questionnaire Design and Attitude Measurement*, Heinemann Educational Books.

Thorndike, R. L. and Hagen, E. *Measurement and Evaluation in Psychology and Education*, 4th edn, John Wiley.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

E361 EDUCATION AND THE URBAN ENVIRONMENT

The course explores aspects of the urban environment and examines the consequences of urban change for communities, families and children and for the teaching and learning processes within urban schools. It also considers curricular implications arising from the urban environment, the teaching of minority group children and the institutional strategies which are available for improving the education of the urban child.

The course may be of particular use to those whose work is concerned with the welfare of children and young people, especially teachers and social workers, and to anyone concerned to understand the process of education in urban areas. Thus the course may also be of interest to local councillors or education advisers.

The course is organized around the following themes:

Block 1 contemporary changes in the urban structure, cultural groups within the modern industrial city and the related issue of territorial justice;

Block 2 the issue of inequalities within cities, focusing on multiple deprivation in the inner city, and the special problems of immigrant groups;

Block 3 the wider debate examining such problems as resources for education and the relationship between education and work;

Block 4 the administration of urban schooling – an analysis of power, decision making and participation in the running of city schools;

Block 5 the development of racial attitudes and an examination of the problems of educating different racial minority groups in schools;

Block 6 the implications of an urban environment for the curriculum, alternative forms of institutions and the role of the teacher.

Objectives

By the end of the course students should be able to:

1 identify the main features of the social structure and of the distribution of educational resources and opportunities in the urban environment;

2 analyse the relationship between education and political, economic and social changes within the urban environment;

3 assess the relative influence of different groups in education decision-making processes within the urban environment;

4 interpret possible effects of urban sub-cultures on children living in cities and their consequences for schooling;

5 evaluate some of the problems and strategies for curricula in urban schools.

In preparing the course, we have assumed that students will have some knowledge in the fields of educational sociology, psychology and curriculum theory and practice. Although such background knowledge will be helpful, those without it should not be deterred from applying for this course. Other courses which are likely to be found relevant, and which are also available in the associate student programme are E203 *Curriculum Design and Development* and D302 *Patterns of Inequality*.

E361 replaces the course E351 *Urban Education*. Since there is considerable overlap of material between these courses anyone wishing to transfer credit gained for E361 to the undergraduate programme, and who has already completed E351, should note that these two courses are excluded combinations for credit purposes.

Assessment

There are five tutor-marked assignments, of which the best three will be used for continuous assessment.

Broadcasts

There are eight radio and eight television programmes, and it should be noted that they form an essential component of the course. Both the radio and television programmes are concerned with the illustration of issues and topics in the course texts, and therefore those who anticipate difficulty in being able to follow the broadcasts should think seriously before embarking on this course.

Preparatory reading

The following books may prove useful as preparatory reading: Field, F. *Education and the Urban Crisis*, Routledge and Kegan Paul; Harvey, D. *Social Justice and the City*, Arnold. The course readers listed below will also provide useful preparation.

Set books

Raynor, J. and Harris, E. (eds) *Urban Education 1: the City Experience*, Ward Lock Educational in association with the Open University Press.

Raynor, J. and Harris, E. (eds) *Urban Education 2: Schooling in the City*, Ward Lock Educational in association with the Open University Press.

Raggett, P. and Evans, M. (eds) *Urban Education 3: The Political Context*, Ward Lock Educational in association with the Open University Press.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

M331 INTEGRATION AND NORMED SPACES

The purpose of the course is to give an introduction to the theory of integration and develop the student's ability in writing a mathematical argument. The course is constructed round the Lebesgue integral, which is a generalized version of the Riemann integral in the sense that it is of much wider applicability. Modern developments in functional analysis, probability and physics make extensive use of Lebesgue integration; yet the Lebesgue integral is no more difficult to grasp than the Riemann integral, and some of its properties are even simpler.

The student should have acquired a general understanding of the methods of real analysis and some familiarity with the properties of linear vector spaces, on a par with that taught in a course for an ordinary degree in mathematics or ancillary mathematics. The topics which are assumed in the course are: convergence of sequences and series of real numbers, elementary properties of continuous functions, the rules for integration (on a finite interval) and differentiation, and the usual inner product on the linear space of continuous functions. (A detailed knowledge of the theory of Riemann integration is not required.)

Content of the course

The correspondence texts serve largely to guide the student as he reads the set book *Lebesgue Integration and Measure*. Units 1–7 build up the definition of the Lebesgue integral on R (and, by analogy, on R^k). The treatment is elementary, and novel in departing from the traditional approach which starts off with a discussion of the abstract concept of measure. Instead the author defines the integral of a step function (one whose graph consists of steps) in a simple fashion and defines the integral of more sophisticated functions by an approximation procedure. Units 8–10 develop powerful theorems regarding sequences of functions, which are used in defining the *measure* properties of suitable subsets of R (and R^k). The *normed spaces* part of the course (Units 12–14) deals with 'global' properties of integrable functions. We consider sets of functions for which a notion of distance can be defined. These ideas are then specialized to a full discussion of Hilbert spaces and Fourier Series, both topics capable of extensive application.

The course ends (Units 15–16) by reviewing the properties of the Lebesgue integral and Lebesgue measure, and generalizing these properties to a theory of integration for functions on arbitrary sets.

M331 is a fairly abstract course, concentrating largely on establishing theorems and a careful consideration of the hypotheses of these theorems. Technical ability in determining the integral of a function without reference to the validity of the method used counts for little in this course, which is about the *theory* of integration.

Tuition and assessment

A certain amount of mathematical sophistication is required from students, but a small amount of face-to-face tuition will be provided, taking the form of Saturday schools in most regions. The course is assessed by the best three of four multiple-choice computer-marked assignments, the best three of four tutor-marked assignments (TMAs) with unit-based questions, a course assignment TMA with a choice of questions based on the course as a whole and a final examination of three hours' duration. The unit-based TMAs include a non-assessed question on each of Units 1–13; these help the student develop his expertise in preparation for the course assignment and examination. The examination is in two parts: Part I consists of ten compulsory multiple-choice questions, and Part II consists of questions requiring six written answers each about a page in length.

Broadcasts

The correspondence texts are amplified by broadcasts which may take the form of an overview of a unit or help with a specific technique. There are eight television programmes and eight radio-vision programmes. The latter are packages in which a series of printed frames (included as part of the broadcast notes for the course) serve as the focal point of a radio broadcast.

Recommended reading

Intending applicants who are concerned about the level of mathematics assumed in this course might be advised to borrow the set book from a library in order to gauge the nature of the material being presented. There is no need to try and understand everything at this stage as the correspondence texts provide a detailed explanation.

Set book

Weir, A. J. *Lebesgue Integration and Measure*, Cambridge University Press.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

M351 NUMERICAL COMPUTATION

This course will be of interest to all users of numerical software in industry, commerce and research, and is about numerical techniques for solving problems by computer. It examines the scientific and technological problems which form some of the standard topics in numerical analysis, and also looks at methods which are used for tackling business and social problems. These latter methods are often referred to as operational research. Because of the breadth of the subject area the course concentrates on a few selected areas, which have been chosen as being for areas which, in our opinion, are currently most important in practical computing. The course is divided into four main sections covering the following topics:

1 the solution of non-linear and simultaneous linear equations;
2 linear programming and integer programming;
3 approximation and integration;
4 simulation.

The emphasis is on the practical nature of the methods, but straightforward mathematical analysis is included where relevant. Each section includes applications and case studies, mathematical theory and computing. The aim is to instil the ability to recognize whether a practical problem can be solved numerically, to choose the right method, to understand the conditions under which the method works, to evaluate the results and to estimate their accuracy.

The mathematical prerequisites for this course are a knowledge of calculus, up to a level probably covered by 'A' level mathematics, matrix theory including matrix manipulation and inverses, and basic linear algebra. Computer programming is not part of the course, but it is an advantage to have used the Student Computing Service. This course will not teach you how to use the Student Computing Service, and if you have not previously used it you will need to read the Student Computing Service DEC SYSTEM-20 Students' Guide, provided in the first mailing.

Each of the case studies and most of the methods described lead to computer algorithms. To minimize the number of visits a student has to make to a computer terminal, a home experiment kit is provided in the form of a fairly advanced electronic calculator. This uses an arithmetic similar to a computer and provides similar mathematical functions. As a consequence many of the exercises in the course can be worked either by calculator or on the computer. The Student Computing Service provides computer packages covering most of the algorithms in the units. Access to an SCS terminal is considered essential.

There are four tutor-marked assignments but no computer-marked assignments. Each tutor-marked assignment has a practical element in which use will have to be made of the packages provided by the Student Computing Service.

There are eight television and eight radio programmes connected with the course.

Three major topics have been omitted from this course because they are covered by other Open University courses, only one of which (T341 *Systems Modelling*) is at present available in the associate student programme. These are the numerical solution of partial differential equations, which is covered by M321 *Partial Differential Equations of Applied Mathematics*, the numerical solution of ordinary differential equations and the numerical solution of eigenvalue problems, which are covered in M201 *Linear Mathematics*. Students interested in formulating problems in mathematical terms are recommended to study T341 *Systems Modelling*.

Students who wish to do preparatory reading should look at Dorn, W. S. and McCracken, D. D. (1972) *Numerical Methods with Fortran IV Case Studies*, Wiley, and Beale, E. M. L. (1968) *Mathematical Programming in Practice*, Pitman.

Set books

There are no set books for this course.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualification obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £75
Returnable deposit for home experiment kit: £10.00
Application period: 3 April–10 October 1978

MDT241 STATISTICS: AN INTERDISCIPLINARY APPROACH

This course is aimed at students who are interested in or who find the need for applied statistics. There are no prerequisite courses and very little prior knowledge of mathematics is assumed. You will be able to cope with this course if you are familiar with the following topics: plotting graphs, using log tables, square roots, inequalities (the meaning of $>$, $<$, $\geqslant$, $\leqslant$), and simple algebraic manipulation. If you are doubtful of some of these techniques a revision booklet is provided.

The aims of the course are to enable you to understand some of the problems which can and cannot be solved using statistics, to explain the basic ideas of probability and statistics and to acquire a basic skill

in data handling and in applying some common statistical techniques.

Six of the units deal mainly with theoretical concepts of probability and random variables; the remaining eight develop practical topics such as estimation, hypothesis testing, correlation, regression, time series and quality control. The emphasis is on ideas, but you will be expected to perform calculations and you are strongly advised to have an electronic calculator. It is possible, but not necessary, to use the Student Computing Service.

The course is based on two set books, stated below. However, most units contain extra material, and a few do not refer to the set books at all. There are four tutor-marked assignments, each containing three assessable and three non-assessable questions and four computer-marked assignments each containing six blocks of questions. There is also an optional set of computer tutorials. The course does not have a summer school, but there will be approximately eight hours of tutorials at the study centres during the year, possibly in the form of day schools.

No preparatory work or reading is necessary but students who feel apprehensive about this course could well take an early look at the two set books.

Set books

Mosteller, F., Rourke, R. and Thomas, G. *Probability with Statistical Applications*, 2nd ed. Addison-Wesley.

Haber, A. and Runyon, R. P. *General Statistics*, 2nd edn, Addison-Wesley.

Course begins: February 1979
Course ends: November 1979
Units of work: 14
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

S266 THE EARTH'S PHYSICAL RESOURCES

The aim of the course as a whole is to enable students to make informed, quantitative judgements on most of the issues concerning the earth's resources that are currently facing the world.

Objectives of the course

On completing this course you should be able to:

1 recognize favourable sites for finding physical resources on all scales;

2 make deductions concerning the origin of physical resources;

3 recognize the functions of various groups in society on the exploration for and exploitation of physical resources;

4 evaluate the different considerations arising in planning for new ventures in the field of physical resource-based industry;

5 examine the future viability of particular resources, given data on reserves, population growth, and increasing per capita consumption.

Rather than leaning exclusively towards the whys and wherefores of resources – their geological properties and behaviour – this course will also focus attention on some wider aspects of resource-based industry.

Included among these will be:

1 studies of the social, economic and political significance of resources in the contrasted situations of developed and developing nations;

2 environmental aspects of resource-based industry;

3 exhaustion of reserves and the prospects of technological solutions to this problem;

4 changing attitudes to the use patterns of physical resources.

Physical resources are not purely geological phenomena, and they will be treated in a *real* way as integral parts of a dynamic world system.

The course takes the form of six separate blocks of correspondence text. The core material of the course deals with the four fundamental sub-divisions of the earth's physical resources: energy resources such as coal, oil, natural gas and uranium; mineral resources such as metal ores and raw materials for the chemical industry; constructional materials such as sand, gravel and brick clay, and water resources for services and industry.

The first section of the course outlines its general terms of reference. Physical resources are defined in terms of how they overlap and interact with the earth's other resources. Their broad relations with economics, politics, industry, population, environment and the 'wealth' of nations are summarized as the basic introduction to the course.

The four subsequent blocks cover the geological principles behind the location of the four main types of physical resource, as a background to the methods used in searching for them. Implications springing directly from the extraction and increasing use of these resources, such as environmental effects and depletion of reserves, are discussed in the relevant blocks. The main function of broadcasts, supplementary material and the set books is to document a wide spectrum of case histories. In this way the practicalities arising from theory can be seen in action, where the action is.

The last block takes stock of what has preceded it. It is intended to promote an awareness, and an ability to pass it on, of the global realities implied by continuation of current patterns of resource usage. Some well-publicized solutions to world problems

(including the one presented in the first set book) are critically examined in the context of the course.

The course has a significant geological content, which could give trouble to those without any previous exposure to geological concepts at all. (The course team has compiled a remedial geology 'package' to accompany the course.) Thus it will be very useful to have some understanding of: simple geological structures; distinguishing characteristics of the main groups of rocks; the chemical composition of minerals; and plate tectonics. The study of resource consumption and availability naturally also involves the ability to compile graphs and perform simple arithmetical calculations.

Tutorials in most regions will involve at least one visit to a local site of resource extraction. Details of these will be provided by staff in your region.

Associate students who contemplate transferring a Course Certificate gained in this course to a current or subsequent Open University BA degree programme, should note that it forms an excluded combination with any half-credit course containing the component S26-, and hence they cannot count both versions of the course for credit towards a degree.

There are six radio programmes and eleven television programmes. Continuous assessment involves eight computer-marked and four tutor-marked assignments. The final examination is of three hours' duration.

Preparatory reading

Students who wish to undertake preparatory reading for the course should read: Read, H. H. and Watson, J. (1971) *Beginning Geology*, Macmillan.

Set books

Meadows, D. H., Meadows, D. L. ,Randers, J. and Behrans, W. W., *The Limits to Growth: Club of Rome Report*, Pan Books.

Smith, P. J. (ed) *The Politics of Physical Resources*, Penguin.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

S334 OCEANOGRAPHY

Some seventy per cent of the earth's surface is covered by oceans, and oceanography is a science which is growing rapidly. It is also interdisciplinary in nature, and this course involves the study of physical, chemical, geological and biological oceanography; the course emphasizes throughout that none of these aspects is independent of the others. The course begins with a broad introduction and then deals with the other subject areas in greater detail.

There are seven main parts to the course:

1 *an introduction to the oceans: man and the oceans:* including an examination of the oceanic environment, the oceans as a source of food, the physical resources of the oceans, and the oceans and pollution; *the shape of the ocean basins:* navigation and depth determination, ocean basins of the world and the life cycle of ocean basins; *the oceanic crust:* its composition, structure and formation, and hydrothermal processes in the oceans; *the ocean water environment:* ocean water and the hydrological cycle, physical and chemical features of ocean water, ocean boundaries, variations within ocean systems and productivity and diversity in the oceans;

2 *physical oceanography:* the physical properties of seawater, including turbidity and optical properties of seawater, sound in the oceans, heat and temperature distribution and mixing processes in the oceans; *the study of waves and tides; oceanic circulation:* water movement, and current measurement;

3 *chemical oceanography: the chemical composition of seawater,* sources, sinks and cycles, inorganic processes in seawater, and its interaction with the atmosphere and sediments; *chemical cycles in the ocean:* nutrient cycles and distribution, carbonate and opal, trace elements, oxygen in seawater;

4 *biological oceanography: the pelagic system:* primary production in the oceans, vertical migrations of zooplankton, food-webs and secondary production, fishes and fisheries; *the benthic system:* trophic relations and productivity of the benthos, estuaries, coral reefs, the continental shelf, the deep sea, marine production patterns;

5 *sedimentary processes:* an introduction to the origin and deposition of sediments and sedimentary processes, including weathering, erosion, transport and deposition, the physical processes of sediment transport and chemical controls on sedimentation; the study of sedimentary processes in nearshore environments, continental margins and ocean basins;

6 *interdisciplinary studies of ocean basin evolution* and changes in ocean basin form and the resultant variations in major current patterns. Variations due to climatic changes;

7 *the political, economic and social implications* of man's involvement with the oceans, with particular reference to the law of the sea.

The course is, in fact, one of the few undergraduate-level course in this subject, taught at universities in this country. It is a third level course in the University's undergraduate programme, and as such assumes that the student has some background knowledge (at least GCE 'O' level standard) of the

four science disciplines concerned – physics, chemistry, biology and earth science, and a higher level knowledge of at least one of these subject areas is desirable. The course does not have a strong mathematical bias, but some basic maths knowledge (again of 'O' level standard) is assumed.

The assessment for the course consists of four tutor-marked assignments, of which the best three will be used, and of eight computer-marked assignments, of which the best six will be used for continuous assessment. There are eleven radio programmes and sixteen television programmes, which should be seen in colour to derive full benefit from them. The broadcast notes contain certain important reading material.

There will be no summer school, but it is hoped to arrange two day-schools at oceanographic research centres. These will form an important part of the course and students will be expected to make every effort to attend.

Preparatory reading

As stated above, the first block gives a fairly full introduction to the course and so not a great deal of preliminary reading is necessary. Nevertheless the Science Foundation Course (S100) would provide useful background reading.

Set book

Harvey, J. G. *Atmosphere and Ocean*, Artemis Press.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

SDT286 BIOLOGICAL BASES OF BEHAVIOUR

Course syllabus

The course presents a unique combination of disciplines, techniques and approaches to the central problem of brain and behaviour. It aims to provide an integral account of behaviour, showing its roots in the biological bases of central nervous system functions.

In its breadth and degree of integration, this course will differ from the more traditional ones. It will provide the student with a critical account of observations and observational techniques, emphasizing the relationship between conceptual frameworks, available technology and experimental design. It will encourage critical analysis of conclusions, and emphasize methodology and conceptual generalization, as opposed to terminology and redundant factual material. It will make clear the social constraints upon, and consequences of, contemporary research. It will stress the evolutionary continuity of human and animal behaviour and nervous systems, and, at the same time, it will examine the uniquely human attributes associated with a complex central nervous system.

The structure and functions of the brain will be approached from the anatomical, physiological, biochemical and engineering viewpoints, and analysed in terms of the contribution of the components of the central nervous system and of the nervous system as a whole to observable behaviour. This is followed by an account of the evolution of the central nervous system and the parallel evolution of behaviour.

A series of key themes: memory, learning, emotion, motivation, hunger, sleep and sex will be studied from the point of view of the relation of physiological, and behavioural observations to the biological bases.

The techniques of ethology and its contribution to the study and interpretation of behaviour will be considered, and there will be an analysis of the consequences of current advances in behavioural sciences for the human understanding, and human use, of human beings.

Course synopsis

Units 1–4

An introduction to the course as a whole is followed by a survey of nervous systems in the animal kingdom. A detailed description of the gross and fine structure of the mammalian nervous system and of its biochemical properties leads into a description of the nervous systems of some of the major groups of the animal kingdom, with emphasis on the relationship between nervous structure and function.

Units 5–7

A survey of sense organs: the different types of stimuli to which they respond: their structure and function. This is followed by an account of the processes by which inputs from the sense organs are converted into perceptions.

Units 8–10

The role of the automatic nervous system, particularly in the control of emotion, and the problem of motivation.

Unit 11

The embryological and post-natal development of the

nervous system and of behaviour; the extent to which the two can be related.

Units 12–13
Problems of learning, remembering and forgetting.

Units 14–15
The information on behaviour which has so far been presented in this course has mostly been related to the behaviour of animals under experimental conditions in a laboratory environment. In these units, such information is related to the natural behaviour of animals in the wild.

Unit 16
The usefulness of models for understanding the structure and function of nervous systems, discussed from a technological point of view.

Unit 17
The philosophical and social consequences of the behavioural sciences.

List of the most important concepts, principles, scientific laws, etc. presented in this course

Major structure of the human brain

Biochemical and physiological correlates of brain structure

The concept of nervous pathways

The microscopic appearance of brain components and their function

The appearance, fine structure and functioning of muscle

The relationship between muscles and nerves

Techniques for studying nerve circuits

Structure and function of selected invertebrate nervous systems

The basic pattern and evolution of the vertebrate nervous system

Sense organ structure and function

Theories of attention and perception

The role of the autonomic nervous system, the hypothalamus and the amygdala in the control of emotional behaviour

Responsiveness to external stimuli, goal-directed behaviour and persistence of behaviour in the absence of external stimuli. The usefulness of the term 'drive' in explaining these aspects of behaviour

Incentive, reinforcement and arousal theories of motivation

The embryonic and post-natal development of nervous systems and behaviour

Types of learning and standard laboratory procedures for investigating learning

Physical correlates of learning, in the brain

Types of memory 'store', their capacity, and how retrieval is effected from them

The nature of stimuli which are effective in eliciting specified types of behaviour in animals living under natural conditions

The motivation of animals when involved in fighting and courtship

Contrasts between the selective pressures acting on group-living and on solitary animals. The consequences of this for behaviour

The application of models in biology. In particular the information processing model of the nervous system

The mind-body problem

The effects of drugs on behaviour, and other problems of mind manipulation

Environment, intelligence and performance

The course should be of particular interest to university graduates in a mono-disciplinary biological subject working in neurobiology, and anxious to broaden their knowledge; to individuals trained in professions for which a background of neurobiology is of importance, but who often have not had an adequately biological base for their work, e.g. psychiatric social workers, educational psychologists, probation officers; and to teachers.

This course is made up of 17 units of correspondence material, 17 television and 12 radio programmes. Students are required to attend one week of summer school, and are urged to attend a number of evening tutorial sessions spread throughout the year. They have four computer-marked assignments and four tutor-marked assignments to complete. In addition students have access to a computer based remedial/diagnostic exercise which will relate to specific areas of the course. Integral to the course is its home experiment kit, including a specially designed tachistoscope, a sheep's brain for dissection purposes, GSR meter and goldfish discrimination learning tank. Students can take an examination at the end of the course.

Preparatory reading

For those unfamiliar with biology: Rose, S. (1970) *The Chemistry of Life*, Penguin; The Open University (1972) S100 *Science: A Foundation Course*, Unit 18 *Cells and Organisms*, The Open University Press; The Open University (1972) S100 *Science: A Foundation Course*, Unit 21 *Unity and Diversity*, The Open University Press.

For those unfamiliar with science: The Open University (1972) *Mathematics for the Foundation Course in Science*, The Open University Press; The Open University (1972) *A Guide to S100 Mathematics MAFS for Beginners*, The Open University Press; The Open University (1972) *The Handling of Experimental Data*, The Open University Press.

Set books

Chalmers, N., Crawley, R. and Rose, S. (eds) *The Biological Bases of Behaviour*, Harper & Row/The Open University Press (Course Reader).

Hilgard, E. R. and Atkinson, R. L. & R. C. *Introduction to Psychology*, 5th edn, Harcourt Brace Jovanovich.

Thompson, R. F. *Foundations of Physiological Psychology*, Harper & Row.

Course begins: February 1979
Course ends: November 1979
Units of work: 17
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £75 (excluding the 1979 summer school fee)
Returnable deposit for home experiment kit: £10
Application period: 3 April–10 October 1978

ST294 PRINCIPLES OF CHEMICAL PROCESSES

This course will be of interest to all scientists and especially people involved in the chemical industry, e.g. technicians, and to teachers of physical chemistry.

We were concerned that chemistry as taught in many universities often has little application to environmental and industrial problems. This course has been structured around a case study of a major process of the chemical industry: the manufacture of polyvinyl chloride (PVC). The main aims of this case study are:

1 to highlight the areas of physical chemistry which are needed to understand the operation of an industrial chemical plant;

2 to illustrate some of the factors, other than chemical theory, which influence the choice of a particular industrial operation.

The PVC process was chosen because it involved an interesting range of chemistry, spanning organic, inorganic and physical. By adopting this approach we hope to be able to show how chemical ideas have to be modified when the scale of operation moves from the laboratory to industry and how the chemistry may be tempered by economic and environmental considerations.

Course structure

The course is not divided into units corresponding to a week's study but into blocks of study. During the first week you will be presented with an overall view of the PVC manufacturing process, the *PVC Case Study* Part 1. During subsequent weeks you will study the process in some detail in the *PVC Case Study* Part 2. Problems will arise here which you will be able to solve by the parallel study of the *Chemical Principles* blocks. The first of these is *Electrochemistry*, which is followed by *Thermodynamics* and *Chemical Kinetics*. The work for the final week of the course is a short case study on the extraction of metal zinc from its ores (the *Zinc Case Study*). Here we see to what extent our chemical ideas can be applied to a very different industrial process.

Broadcasts

There are five radio and sixteen television programmes associated with this course.

Several of the television programmes are used to show experiments and techniques that are too dangerous or sophisticated to be done in the home, or for demonstration of simple experiments that are carried through at a rate many times greater than you could achieve at home. Other television programmes have been filmed on location at plants concerned with PVC production.

List of the most important concepts, principles, scientific laws etc. presented in this course.

Solubility products and the precipitation of ions from aqueous solution

Electrochemical cells, electrode potentials and the electrochemical series

Electrolysis and its application to industrial processes

Principles of fractional distillation; its use as a separation technique in industry

Applications of chemical thermodynamics, including:
- —energy changes associated with chemical processes
- —the use of tabulated thermodynamic data
- —equilibrium constants; factors affecting the equilibrium position attained by a chemical reaction

Principles of chemical kinetics and their application to:
- —the study of simple reaction mechanisms
- —chain reactions
- —catalysis
- —polymerization

The course assumes a very basic knowledge of the following concepts:

The Periodic Table and electronic structure

Elementary theories of bonding

Stoichiometry

Solutions

Electrolytes

Chemical equilibrium

Enthalpy change

Shapes of molecules

Some familiarity with the concepts listed above is assumed, and Units 7–10 (inclusive) of course S100

Science: A Foundation Course would be useful background reading before starting ST294. The course has four tutor-marked assignments and eight computer-marked assignments.

There is a one-week course-based summer school specifically designed for this course, and a home experiment kit.

Set books

There are no set books for the course.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable Course Certificate or Letter of Course Completion
Course tuition fee: £75 (excluding the 1979 summer school fee)
Returnable deposit for home experiment kit: £10
Application period: 3 April–10 October 1978

T241 SYSTEMS BEHAVIOUR

Course syllabus

One of the main contributions of the systems approach has been in the recognition that there are common elements in the behaviour of apparently widely differing systems. In fact, the very recognition and identification of something as a system is often the first step leading to an understanding of its behaviour. This course explores methods of identifying, describing, modelling and controlling systems as well as of designing new ones, as part of the process of understanding, predicting and influencing systems behaviour.

Examples drawn from a wide range of systems are studied in some depth, including social, biological, economic, industrial, organizational and engineering systems. The course is suitable for students from any background who are interested in systems and systems behaviour.

The course is based on a series of case studies each linked to theoretical concepts about systems and to techniques for dealing with systems behaviour. There are eight case studies on the following topics:

Container ports
Air traffic control
UK telephone system
Work group structures in mining and motor manufacture
The human respiratory system
An economic system
Grassland ecosystem
A local government system

About one week is spent studying a particular system in detail followed by a linked week on the application of specific techniques and theoretical ideas. These will include:

Simulation
Man-machine interfaces
Human performance characteristics
Socio-metric analysis
Group dynamics
Dynamics of systems behaviour
Organizational behaviour
Population models
Economic models

Students are encouraged to use a series of programmes on the Student Computer Service which demonstrate particular ways of modelling systems attributes.

There is a home experiment kit which includes: manual cargo handling simulation; air traffic control system modelling; analogue computing; hydraulic modelling; ecosystem population experiments; and an organizational information demonstration.

The sixteen television programmes are almost all linked to the case study or technique being studied, and the eight radio programmes are used to link reader articles, case studies, and techniques together.

Students will be expected to complete four tutor-marked and four computer-marked assignments. They will also be expected to attend one week at summer school where a major system study will be undertaken. A three hour written examination will be held at the end of the course.

The course can be regarded as a basic introduction to systems concepts which are attracting attention in many different fields. It is envisaged that the course will be of particular interest to members of the following professional groups: architects and town planners; medical professions; administrators (e.g. in private or public institutions such as hospitals, schools and trade unions) and managers; engineers; scientists; social scientists; systems analysts and market, operational and other research workers.

Preparatory reading

Students who wish to undertake preparatory reading for the course should read: Churchman, C. W. (1968) *The Systems Approach*, Dell Publishing Company; The Open University (1971) T100 *Technology: A Foundation Course*, Unit 1 *Systems*, The Open University Press.

Set book

Beishon, R. J. and Peters, G. (eds) *Systems Behaviour*, 2nd edn, Harper & Row/The Open University Press (Course Reader).

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £75 (excluding the 1979 summer school fee)
Returnable deposit for home experiment kit: £10
Application period: 3 April–10 October 1978

T242 SYSTEMS MANAGEMENT

Most people are involved in a variety of organizations (at work, in the community, at leisure). When problems arise in these organizations they very often don't fit into neat discipline categories (such as electronics or sociology) and people are less able to cope with them because of the increasing tendency for specialization in industry and technology. In order to tackle these problems we require an inter-disciplinary approach so that we can integrate the knowledge of various disciplines. It is for these reasons that the systems approach is regarded as an important *approach* for tackling real world problems. Students (from all backgrounds) who are interested in broadening their appreciation of how organizations tick, how decisions are made and problems solved will find this course useful.

Aims of the course

Systems Management is an attempt to demonstrate the way the systems approach can be applied to those particular systems which involve human beings and their activities: 'human activity systems', and it concentrates on *how* the behaviour of such systems comes about.

Unfortunately the word 'management' has acquired an identification with industrial or commercial management, and is widely used in juxtaposition with 'the unions' or 'the men' to indicate one of the supposed two sides of industry. But if we want to study the *process* of management, referring now to the means of bringing about some organized activity we lack a suitable term. Words such as 'directing', 'controlling', organizing' and 'managing' are used, but they tend to imply the presence of a director or controller and are far from neutral terms to many people. So in the context of this course *systems management* means the *process or means by which a particular system's behaviour is produced*.

Course content

The course concentrates on three conventional parts of an organization's activities: socio-economic aspects, people management aspects and operational aspects, and analyses each of these in terms of three systems ideas: goals, and goal conflicts, information, and implementation and behaviour.

In addition there are units on various aspects of the systems approach, a case study of a large organization to demonstrate some of the facets of such systems, as well as activities including an Intray analysis, role playing, and some pencil-and-paper games.

This course is a complement to T241 *Systems Behaviour* and does not precede it, or follow from it.

There are eleven television and eight radio programmes. Students will be expected to complete four tutor-marked assignments and six computer-marked assignments. They will be expected to attend one week at summer school and a number of tutorial sessions will also be provided. A three-hour written examination will be held at the end of the course.

It is envisaged that the course will be of particular interest to members of the following professional groups: administrators (in private and public institutions such as schools, hospitals, trade unions, etc.); managers (in private and public industries); engineers and scientists; sociologists; systems analysts and OR professionals; economists; architects; town planners and members of the medical professions.

Preparatory reading

If you are new to systems ideas you may like to read some of the following:

Churchman, W., *The Systems Approach*, Dell. (Unobtainable in the UK but available in some libraries).

The Open University, *Systems*, Unit 1 of T100 *Technology Foundation Course*, The Open University Press.

Beishon, R. J. and Peters, G. (eds) *Systems Behaviour*, The Open University Press/Harper and Row, 2nd edn (especially articles 1, 3 and 16).

Set books

Ansoff, H. I. *Corporate Strategy*, Penguin.

Leavitt, D., Dill, W. and Eyring, H. *The Organizational World*, Harcourt Brace Jovanovich.

Lupton, T. *Management and the Social Sciences*, Penguin.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualification obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70 (excluding the 1979 summer school fee)
Application period: 3 April–10 October 1978

T262 MAN-MADE FUTURES: DESIGN AND TECHNOLOGY

The shape of the future no longer seems a foregone conclusion. In Western industrialized society, our comfortable assumption that we shall go on getting richer, healthier, brighter and shinier has been called into question. This course involves students in a new design approach to creating alternative futures to that imposed by continued technological growth.

The course is based on the assumption that we are now at a major decision-point: whether to go on struggling with the problems generated by adherence to advanced technologies and a growth economy, or to turn to a radically new set of possibilities associated with the social and technological implications of the natural limitations of a finite world. In these new situations we shall have to design new kinds of everyday life support systems and new ways of living with them. We should all, whether non-professionals or professionals from whatever discipline, be involved in that design process.

This course is predominantly concerned with designing the future, but does not provide any ready-made answers. Instead, it aims to help students to do their own problem-exploring. It is a 'how to question' rather than a 'what to answer' course.

The course begins by analysing some of the inter-dependencies of social change and technological change (Units 1–3). It goes on to consider mechanisms for participation in the assessment and choice of technological changes (Unit 6), and then the role of design in the generation of alternative futures (Unit 9).

Three basic areas of human requirements are adopted as case studies: the future of shelter (Units 4–5), food (Units 7–8) and work (Units 10–11). Throughout the course, differing 'visions' of the future are presented, but there is an emphasis on the consideration of 'alternative' (or 'soft' or 'low') technology.

An important part of student participation in the course is self-directed project work, based on the home, neighbourhood or work situation. This is a 'design' project, but it is concerned more with finding the right design problem to solve than with the detailed problem-solving normally associated with design education. Some new types of course materials have been developed to support this project work, including a design project guide (Unit 12), a design methods manual (Units 13–16), a 'sampler' of some past projects, and a project 'game'.

This is not just a technology-in-crisis course, but is intended to be much more positive about seeking new futures for technology and society. One emphasis in this course is that there should be wider public participation in the choice of alternative futures. The course team is confident that T262 students will be thoroughly competent to join that wider participation – with some good ideas of their own to contribute to the debate.

No specialized technological knowledge is assumed. Students wishing to begin preparatory work for the course could begin to read either of the set books.

There are eight radio programmes and eleven television programmes. Continuous assessment involves five tutor-marked assignments, two of which form a project assignment, and there is a three hour examination at the end of the course.

Other courses which complement T262 include: PT272 *Environmental Control and Public Health*, T273 *Food Production Systems*, S265 *The Earth's Physical Resources* and, in particular, T361 *Control of Technology*.

Set books

Cross, N., Elliott, D. and Roy, R. (eds) *Man-made Futures: Readings in Society, Technology and Design*, Hutchinson Educational (Course Reader).

Dickson, D., *Alternative Technology and the Politics of Technical Change*, Fontana.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

T273 FOOD PRODUCTION SYSTEMS

Food is essential for life, so that its availability, and its price, is of concern to everyone as a consumer; its production, processing and distribution are of special interest to those working in agriculture and the food industry and also to the amateur cook or gardener. This course aims to analyse the production and supply of food on a world scale, to see how this occurs and how it may change or be changed in the future. To do this, it is necessary to adopt an interdisciplinary approach, looking both at the biology and chemistry of food production and at the social, economic and political factors which influence the organization and control of the technical processes of food supply.

Aim of the course

An overall aim of the course is to encourage students to integrate skills from a wide range of disciplines in analysing complex problems, like that of food supply; more specialized aims are:

1 to provide an understanding of the principles

involved in the production, processing and distribution of food;

2 to show how social, political and economic factors affect the demand for food and the way in which food is produced;

3 to enable students to comment critically on the causes and effects of changes in the production and distribution of food.

Course content

There are sixteen units in the course; *Units 2–9* concentrate on the technical aspects of food production, while *Units 10–15* are more concerned with social, economic and political factors. *Unit 1* introduces the nature and estimates of the magnitude of the world's food problem. *Unit 2* looks at the nutritional needs of humans, and the way these are affected by body weight, activity patterns, etc.; the unit involves a detailed analysis of the student's own diet over a short period. *Units 3 and 4* examine the growing of crops, which form the primary source of all food, and show how their production can be maximized. Primary foodstuffs may be altered in a number of ways before consumption, so *Unit 5* looks at the effect of using animals, for meat or milk production, on the overall supply of food while *Unit 6* examines the effects of microorganisms, as pathogens or agents of decomposition of food material. *Units 7 and 8* are concerned with the industrial and domestic processing of foodstuffs, to modify their nutritional and other properties, and at the engineering problems which arise in this connection.

The whole technical sequence of food production is examined using bread as a case study in *Unit 9*, which also shows how this sequence is affected by the needs and wants of the producer and consumer, subjects treated in more detail in *Units 10 and 11*. Consumer and producer do not operate in isolation, but within an organizational framework for the provision of land, credit, food distribution and storage, studied in *Units 12 and 13;* all the interactions between these people and organizations depend on political decisions which govern national priorities for the allocation of resources to food production or other activities (*Unit 14*) and on the world trade in food and other items (*Unit 15*). The final unit provides more detailed information on some recent developments which are likely to affect food supply and students will be asked to examine the possible effects of these developments, making use of the knowledge and skills gained from the course.

Throughout the course there is an emphasis on the common, but distinct food problems of Western countries and the Third World, and the course is designed to encourage students with a diversity of backgrounds to bring their skills to bear on analysing these problems. The course fits closely with other technology and science courses dealing with biological and environmental problems, such as PT272 *Environmental Control and Public Health*, T262 *Man-Made Futures*, and S266 *The Earth's Physical Resources*. The course also relates closely to D204 *Fundamentals of Human Geography*, and D203 *Decision Making in Britain*.

Any necessary specialized vocabulary will be taught during the course although familiarity with the elementary ideas of biology and chemistry would be helpful. There is a pre-test and introductory reading on these topics in the first supplementary material, but students who feel unsure of these topics might wish to examine Unit 0 of T100, *The Man-Made World* and Unit 20 of S100, *Science Foundation Course* as an indication of the level of familiarity required.

The course has four tutor-marked assignments (TMAs) and six computer-marked assignments (CMAs); one TMA is based in part on the diet study mentioned earlier, and it would be helpful to students in answering this if they attended the half-day school which occurs early in the course. There are several original papers included in some of the units; an ability to appraise these critically, and to evaluate original material presented in the broadcasts will be assessed in the TMAs for the course.

There is no home experiment kit or summer school for this course, which should be suitable for most disabled students. Possession of, or access to, some form of calculator for the diet study would be useful, but not essential; a tape recorder for radio-vision programmes would also be helpful.

There are eight television and eight radio programmes for the course, covering case material and arguments which would be difficult to present in the text. In addition, the broadcasts are used to examine locations and situations which would otherwise be inaccessible to most students. For this reason, the broadcasts should be regarded as essential and tutors will be instructed to expect information from these to be brought out in assignments. Colour viewing would be a minor benefit, and as radio-vision will be used for several radio programmes, a tape recorder would be useful for recording these.

Set books

There are no set books for the course.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate
Course tuition fee: £70
Application period: 3 April–10 October 1978

T291 INSTRUMENTATION

This is an interdisciplinary course concerned with the acquisition of data, in coded or analogue form, from the measurement of physical quantities and the subsequent transmission, processing and display of these data. It will be of interest to all those seeking an introduction to the techniques of instrumentation and to commonly-occurring hardware. It will appeal particularly to instrumentation engineers and technicians over a wide field, from the medical technician to the chemical plant instrumentation engineer. The course may also be of possible general interest to physics teachers.

The objectives of the course are to enable the student:

1 to describe what instrumentation does and the types of application for which it is used;

2 to recognise, describe and evaluate some of the problems which arise when employing instrumentation systems, both with the individual components and with the systems as a whole;

3 to describe some important techniques, together with examples of the transducers, used to measure a selection of physical variables;

4 to make a reasoned choice between alternative ways of satisfying an instrumentation requirement.

The course is divided into two main parts to meet these objectives. The first part of the course is concerned with a study of both the theory of transducers and the ways in which they are actually used. The texts include extracts from manufacturers' specifications so that the student is introduced to details of proprietary devices. One of the uses of transducers described is in the numerical control of machine tools. To introduce this topic there are two units on logic supplemented with home experimental work on a logic tutor.

The second part of the course deals with signal transmission and processing, telemetry, data recording and display, and the problem of noise. In these later units case studies are used to illustrate aspects of the material covered in the units.

This is an introductory course, but nevertheless it does assume a background of scientific or technical education going beyond G.C.E. 'O' level. Some mathematics (about 'A' level standard) is required for this course, since knowledge of some elementary calculus is assumed. A booklet entitled *Mathematics for Instrumentation* is issued with the course, and this is useful for those who wish to refresh their knowledge of basic mathematical concepts, including any calculus used in the course.

It is advantageous to study TS282 *Electromagnetics and Electronics* concurrently with T291 since the two courses hold a joint summer school. Students who study TS282 with or before T291 may find themselves at a slight advantage, although only a small background knowledge of electronics is assumed in the Instrumentation course.

Summer School

Further practical experience is provided during the summer school period, where a four-part programme has been designed around the following exercises:

(i) calibration of a selection of transducers;

(ii) design and assembly of more complicated logic circuits than those met in the home experimental work;

(iii) design and assembly of a working weather station;

(iv) use of linearization, modulation and correlation in an instrumentation system. (This experiment is replaced by a TS282 experiment for students taking TS282 with T291.)

Preparatory reading

The set book for the course (see below) probably provides the most useful preparation. It presents a selection from scientific journals or recent papers which discuss a wider range of instrumentation systems.

Assessment

The assessment for the course consists of four tutor-marked assignments, of which three will be used for continuous assessment, and seven computer-marked assignments, of which five will be used for continuous assessment.

Broadcasting

There are eleven television programmes which are used to demonstrate items too large or too costly to supply in home experiment kits. Several programmes were made on site at large installations using instrumentation. There are eight radio programmes of which six use the technique of radio-vision, in which selected topics from the relevant unit are 'talked through' while the student follows a sequence of figures printed in the broadcast notes.

Set book

Hunter, J. J. and Crecraft, D. I. (eds) *Instrumentation*, Holmes McDougall (Course Reader)

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £75 (excluding the 1979 summer school fee)
Returnable deposit for home experiment kit: £10
Application period: 3 April–10 October 1978

T321 TELECOMMUNICATION SYSTEMS

Nature of the course

The central aim of the course is to describe the basic engineering principles of telecommunication systems. The main accent is placed on the way in which the various elements of telecommunication systems are selected and combined, the functions they serve, the way they interact and the effects their inherent imperfections have on the overall characteristics of the system.

The course will deal mainly with systems used to generate, control and modify electrical signals, and with terminal installations which convert electrical signals into audible or visible information, and vice versa. These will not be considered purely in terms of their electrical and physical characteristics. The need for telecommunications systems to provide satisfactory performance in human terms, and at acceptable costs, causes factors such as properties of aural and visual perception, degree of tolerance of imperfect services and relative cost considerations to feature prominently in the course.

The course is usually taken (in the undergraduate programme) by those who have already studied course TS282 *Electromagnetics and Electronics* or T291 *Instrumentation*. Applicants to the associate student programme should note, however, that the first unit of the course is a 'matching' unit consisting of sections covering the specific material needed from TS282 and T291 in such a way that students should be able to acquire the relevant knowledge from those two courses. The course content assumes a familiarity with the following: elementary ac circuit theory; complex numbers; simple calculations with complex impedance; phasors; Fourier components and spectra of signals (e.g. an understanding of how to derive the Fourier series for square waves); simple filters; elementary probability; principles of amplification and feedback (the virtual earth operational amplifier); and very simple transistor and diode circuits with resistors, capacitors and inductors.

Outline of the course

The course includes three types of material:

1 essential background material on what may be called telecommunications principles. This involves the matching unit and course units on modulation; channels and lines; noise, interference and distortion; and digital systems. This part of the course amounts to six units;

2 a detailed study of two types of telecommunication system; telephone, including data transmission, and television. The choice of a switched (telephone) and a broadcast (television) system allows a very wide range of concepts to be introduced. The restriction to two types of system allows each to be covered in sufficient depth to provide a detailed context in which these concepts can be studied, without having to contend with long lists of applications of the same concepts to a wide variety of current and possible future systems. This part of the course amounts to seven units;

3 two case studies: an ongoing experiment on the use of an experimental telephone exchange is examined from the point of view of system planning and control.

A subject which is of special significance to Open University students, teaching over telephone circuits, is investigated. This involves the problems which arise when conference calls and loudspeaking telephones are used in teaching situations, particularly tutorials. It also involves current developments in the transmission of graphical information over telephone lines and its visual display at remote terminals. The case studies amount to two course units.

The final element of the course looks at the impact of telecommunications on society and consists of one unit.

The selection of papers in the course reader are copies of previously published papers in telecommunications journals and provide more detail about topics covered in the units and also deal with some new subjects which illustrate concepts of the course and provide useful background knowledge. They serve the additional function of introducing students to some of the published literature on telecommunications.

The practical aspects of the course, which mainly consist of looking at elements of telecommunication systems and of seeing how they interact and how they affect signals, do not involve any manual skills. They will therefore be dealt with in the sixteen television and eight radio programmes.

Continuous assessment involves eight computer-marked and 4 tutor-marked assignments. The final examination is of three hours' duration.

Preparatory reading

Some students might find it helpful to borrow two books from a library for use as preparatory reading. These are *Communication*, A Scientific American Book (Reprint of *Scientific American* September 1972), W. H. Freeman and Co; Pierce, J. R. (1962) *Symbols, Signals and Noise*, Hutchinson.

Set books

Hamer, M. P. R. and Smol, G. (eds) *Telecommunication Systems*, Holmes McDougall (Course Reader).

Smol, G., Hamer, M. P. R. and Hills, M. T. *Telecommunications: A Systems Approach*, Allen & Unwin.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third

Qualifications obtainable: Course Certificate or Letter of Course Completion

Course tuition fee: £70
Application period: 3 April–10 October 1978

T341 SYSTEMS MODELLING

This course is not aimed primarily at training professionals in the area of systems modelling, but more at informing those people whose lives and work are affected by it. However, those thinking of entering the area of management science would also find this course a useful grounding.

The aim of the course is to break down the mystique that now surrounds the use of quantitative models and computer methods in the making of major decisions. In both industry and government, various professions (operational research, econometrics, systems engineering, to name only three) have become firmly established on the basis of claims to be able to quantify and analyse the key factors involved in complex decisions – in short, to model the systems in question. These professions use computer models to recommend routes for motorways, the layout of hospitals, financial policies and the formulation of the Chancellor's Budget. Groups of scientists are now even proposing global management policies on the basis of models of the whole world.

When such modelling studies impinge on us, whether in our jobs or as citizens, we need to be sure that they have been properly deployed. An informed critic needs a basic familiarity with the methodology and techniques of the subject, and this the course provides. But the critic also needs to ask whether the techniques used are appropriate to each particular problem, and how far the results of a 'computer study' can be taken as a valid basis for taking action. So the course also devotes considerable attention to critical appraisal of modelling studies. This requires the student to deploy, and develop, skills of judgement and argument as well as quantitative skills. (In practice, this means that assessment will consist of critical essays at least as much as of calculations.)

Finally, there is the question of values. The choice of a particular form of model can itself imply and often disguise quite critical value judgements. The *Systems Modelling* course emphasises questions of value throughout.

Systems Modelling should be of interest to a wide spectrum of students – all those who have an interest in the way the effects of complex decisions can be quantified. People in management and administration have an obvious interest, as does anybody involved in urban planning, but equally so do those who are affected by the actions of these groups, that is, practically everyone.

Those with a mathematical background who wish to explore the potential of mathematics in the areas of social and economic decisions should also find the course appropriate. It will require them to develop their judgement about when and how to apply mathematics to problems containing significant subjective elements, and how to interpret the results.

Extensive use is made of statistical ideas, and a sound understanding of the ideas of probability, distributions, estimation, correlation and hypothesis testing is necessary. Familiarity with linear regression is assumed. Success in MDT241 *Statistics: an Interdisciplinary Approach* is indicative of the level required.

The use of mathematical language to represent aspects of systems is central to the course, so a basic ease and familiarity with algebraic symbols and equations is essential. Anyone having sufficient knowledge of statistics is unlikely to have trouble with the mathematics and although knowledge of calculus would be an advantage, it is not essential.

Students who have not already taken a systems course (T241, *Systems Behaviour*, T242, *Systems Management* or TD342, *Systems Performance, Human Factors and Systems Failures*) may find some difficulty with systems ideas and some background reading in the systems area is recommended.

Course content

During much of the course particular systems are described, as well as the techniques used in modelling such systems. This case-study form predominates in eleven of the sixteen units.

Units 1–2 explain the Systems Approach, explain the notion of a methodology, and show how a quantitative representation ('model') of a situation can fit into the decision-making process.

Units 3–6 develop skills and techniques for model building in the context of agricultural and industrial concerns which have relatively well-defined objectives.

Unit 7 takes the form of a student activity which requires the student to exercise these skills. A good deal of information and data about a situation is supplied, and the student is asked to do some modelling work for himself or herself. *This student activity requires a good deal of work at a Student Computing Service computer terminal in the period May–June*, and is assessed.

Unit 8 discusses what degree of rational justification underlies the use of models.

Units 9–13 discuss, using case studies, the use of quantitative methods to represent people's *values* – eg. the relative worth of 'amenity' or 'cost' of an area of woodland. This use of models is much more contentious than the uses described earlier, and opposing views are brought out.

Units 14–16 concentrate on the notion of the *validity* of models and how this might be evaluated. Units 14 and 15 discuss economic models, and *Unit 16* is about global models.

Related courses

Students who have taken T241, *Systems Behaviour* or T242 *Systems Management* will find *Systems Modelling* a natural continuation. It is also particularly relevant to those who have studied decision-making processes from a social science or educational perspective. On the other hand, people with a mathematics background should find this course thought-provoking because it demonstrates both the potential and the pitfalls of applying mathematical modelling to complex socio-economic systems. The course is designed to complement TD342, *Systems Performance: Human Factors and Systems Failures* (not yet available in the associate student programme). M351 *Numerical Computation* treats in depth the mathematical and computational issues arising from some of the techniques taught in *Systems Modelling*.

Summer school

The four systems courses (T241 *Systems Behaviour*, T242 *Systems Management*, T341 *Systems Modelling* and TD342 *Systems Performance: Human Factors and Systems Failures*) are served by a single summer school. To qualify for a half-credit in *Systems Modelling* students must attend one systems summer school. This requirement can be satisfied by a previous attendance or by attendance in the year that *Systems Modelling* is taken. The summer school is project-based and students take part in a project designed to tackle a real systems problem.

Assessment

The course is assessed by computer-marked and tutor-marked assignments. During the first half of the course students are supplied with a collection of information about a system. The first tutor-marked assignment concerns some of the analysis of this material and the second is based on the student activity. One third of the final examination is based on the work of analysis and criticism of world models, covered in Unit 16.

There are eight television programmes and eight radio programmes. The television programmes aim to illustrate various aspects of modelling and to set the modelling process in the overall context of the decision-making it is designed to aid. Several of the radio programmes take the form of radio-vision and are an important aid to interpreting the results of modelling exercises. It is possible that the radio programmes will be replaced by audio-cassettes, so access to a cassette player may be necessary.

The *Student Computing Service* is extensively used for teaching and assessment and access to it is essential. Provision is made for using the postal service but this is an inadequate substitute for true interactive use.

Preparatory reading

Those who have not taken a systems course before would be well advised to read Module 1 of T241, Unit 3 of T242 or Unit 1 of TD342, any of which provides a useful introduction to systems ideas.

Set book

The set book for the course is:
de Neufville, R. G. and Stafford, J. *Systems Analysis for Engineers and Managers*, McGraw-Hill.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70 (excluding the 1979 summer school fee)
Application period: 3 April–10 October 1978

T361 CONTROL OF TECHNOLOGY

The control of technology has in recent years been at the centre of many important debates. These range from major international questions, such as how to control the spread of nuclear weapons, to national controversies over motorway planning and nuclear power, and more local issues such as redundancies caused by the introduction of new production methods into a firm or the dumping of wastes. Since such issues are increasingly recognized as having political and social as well as technical and economic importance, *Control of Technology* has taken a broad, interdisciplinary approach. The course is expected to be of interest to students from many backgrounds, in particular to those from a technology background who wish to learn more about the political and social aspects of technological decision-making and to those from a social sciences background who wish to increase their understanding of the relevance of technology in contemporary affairs.

The aims of the course are:

(a) to provide an understanding of technical and technological decision-making at various levels and of the different mechanisms and institutions existing in Britain and in other societies for the regulation and promotion of technology;

(b) to show the conflicts of interest, the value judgements and the political, economic, technical and other constraints involved in particular examples

of decision-making involving technological change;
(c) to give access to some recently developed techniques and approaches (e.g. technology assessment, environmental impact analysis) for aiding decision-making, and to give an awareness of their uses and limitations in practice;
(d) to enable students to conduct a self-directed project in a problem area involving the control of technology of particular concern to themselves or to a community to which they belong.

Running through the course are three interlinked streams of study: theory, case-studies and project work. The theory stream is structured around the political responses to the question 'how should technology be controlled in the public interest?'. The responses examined are (a) more government control of technology (Units 3–4), (b) greater public involvement in decision-making about technology (Units 6–7), (c) greater decentralization of society and the development of community-based industries and technology (Units 10–11).

The case studies, which illustrate the above responses through real-world examples, focus on the issues of:

nuclear power (Unit 5)
trade unions and the environment (Unit 9)
control of nuclear weapons (Unit 13)
choice of appropriate technology for developed and developing countries, with special emphasis on China (Units 15-16)

T361 Unit titles

Unit 1	Social Control of Technology
Unit 2	Project Guide
Units 3–4	Government and Technology
Unit 5	Nuclear Power: the Windscale Controversy
Units 6–7	Participation and Technology
Unit 8	Methods Guide
Unit 9	Trade Unions, Technology and the Environment
Units 10–11	Community Technology
Unit 12	(*No text*)
Unit 13	Arms Control
Unit 14	(*No text*)
Units 15–16	Choosing Appropriate Technology

A self-directed, action-oriented project, which runs through the whole course, occupies about one-quarter of the total study time. In their project work students will have the chance to relate what they have learned both in this course and elsewhere to a specific problem area in the planning, assessment, choice or implementation of technological change of particular concern to themselves or to a community to which they belong. Many types of project are envisaged, including 'planning' projects (e.g. an environmental assessment of a proposed public project), 'design' projects (e.g. a feasibility study for setting up a viable community transport scheme), and 'research' projects (e.g. an investigation of safety within an industry or firm). Guidance on the selection and execution of projects will be given in the course by means of course material (Unit 2, Unit 8), radio broadcasts and tuition.

There are no formal prerequisites for this course and students will not require any specific technical or mathematical knowledge, although some familiarity with scientific and technical terminology will be assumed. Other technology courses which provide a useful background are: T100 *The Man-made World: a Foundation Course* (not available in the associate programme); T241 *Systems Behaviour*; T273 *Food Production Systems;* PT272 *Environmental Control and Public Health*; PET271 *Technology for Teachers*; and T262 *Man-made Futures: Design and Technology*, which would make a particularly appropriate introduction. At third level T361 would well complement T341 *Systems Modelling* or TD342 *Systems Performance: Human Factors and Systems Failures* (not yet available in the associate student programme).

The course also has obvious links with the many other courses offered by the University which are concerned with various aspects of decision-making, for example, D203 *Decision Making in Britain*; S266 *The Earth's Physical Resources*.

Tutorial support for project work will be provided by means of day or half-day schools (which it is important for students to attend) plus 'flexible' telephone or other contact with tutors. There is *no* summer school.

There are five tutor-marked assignments, the best four to count towards the final assessment grade, and *no* CMAs. TMA04 and TMA05 are a combined assignment for the purpose of project submission.

The course should not present major problems for disabled students, although the project work could (depending on the topic chosen) involve visits to libraries, local government officials, or contact with local community groups.

There are eight television and eight radio broadcasts which form an integral part of the course, covering aspects which cannot be adequately presented in print. The broadcasts will therefore be used for assessment purposes.

Either of the set books, but in particular the Course Reader, would be useful preliminary reading.

Set books

Boyle, G., Elliott, D. and Roy, R. (eds) *The Politics of Technology*, Longmans (Course Reader).
Patterson, W. C. *Nuclear Power*, Penguin.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £70
Application period: 3 April–10 October 1978

T391 CONTROL ENGINEERING

Control engineering has application in all the disciplines of technology and is of wide industrial importance. Many engineers will not have had the opportunity of studying control while following their particular line of study.

Control theory is used to analyse and design systems that are controlled or are to be controlled. The term 'system' can apply in its broadest sense; control theories have been used in the analysis of sociological, biological and economic systems. However, this course concentrates on the application of control theories to engineering systems. The emphasis in the course is on the practical use of and need for these theories. Therefore existing engineering systems have been used to illustrate the theories and home experimental work is also provided for this purpose. The two main case studies are of a control system in a power station and the control of a satellite tracking antenna.

About $12\frac{1}{2}$ units of the course develop the theory of control and show how it is applied to engineering tasks. About $2\frac{1}{2}$ units are associated with the home experimental work. This work gives students an opportunity to try out the design method of control and assess the results of designs. There is also a unit which comprises a file of papers taken from the technical press with notes guiding students through the file. This file is included to provide students with the ability on completion of the course to read intelligently published works on control engineering.

No initial knowledge of control theory or practice is assumed and any mathematical topics which are used to support the material and are not listed below will be taught as part of the course. The course assumes a familiarity with the form of the solution of first and second-order differential equations, a knowledge of Newton's laws of motion and an understanding of electricity and terms such as current, voltage resistance and capacitance. Some revision of these topics will be done in the units. The required level of knowledge could be obtained by studying one of the following courses: TS282 *Electromagnetics and Electronics*, T291 *Instrumentation* or T231 *Introduction to Engineering Mechanics* (not yet available in the associate student programme).

The home experiments will be based on a kit which includes a chart recorder and a miniature process, involving pumps, beakers and water. A Saturday school will be arranged in some regions and we would strongly recommend that students attend where possible, as it should help them to progress with the experimental work. You will need to purchase a few items of stationery for your home experiment work.

This course has eight television but no radio broadcasts. There are four computer-marked assignments and four tutor-marked assignments; the last tutor-marked assignment, a report on the practical work carried out by students, is compulsory. The Student Computing Service will be available for use. The work on SCS is not essential, but students should find it helpful when doing their practical work and parts of the assignments.

There is no recommended preparatory reading for this course. Applicants who are unsure of the level of knowledge assumed for the course are advised to look at Unit 3, Section 6, and Units 8, 9 and 10, Section 2 of course T291.

Set books

There are no set books for this course.

Course begins: February 1979
Course ends: November 1979
Units of work: 16
Course level: third
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £75
Returnable deposit for home experiment kit: £10
Application period: 3 April–10 October 1978

TS282 ELECTROMAGNETICS AND ELECTRONICS

Course syllabus

This university course in electromagnetics and electronic circuit design assumes little prior knowledge of electronics or electromagnetics but does assume a background of scientific or technical education going beyond GCE 'O' level.

Some elementary mathematics is required for this course. Students should be familiar with trigonometric functions (sine, cosine, tangent), complex numbers and elementary calculus (differentiation, integration and simple differential equations). A preparatory booklet covering these topics will be issued at the beginning of the course.

The course will involve a good deal of electronic experimentation at home, centred round a cathode-ray oscilloscope, a signal generator and other apparatus and components sent to each student.

Students will be required to attend the joint T291/TS282 summer school at which they will be able to have the circuits they have designed evaluated, have their apparatus calibrated and learn to handle more complicated equipment.

The course is intended to be a preparation for

various higher level university courses in science and technology. It is also intended to be suitable for those engaged in industry, government establishments, hospitals, etc., who find they have a need for electronics, even if they do not intend to proceed to higher level courses.

Course synopsis

The first four units of this seventeen unit course are concerned with the basic ideas of electricity, magnetism and electromagnetism and with devices which depend upon them, such as transformers, capacitors, motors and meters.

Unit 5 deals with semiconductors. The principal devices dealt with are junction diodes, Zener diodes, solar cells and junction transistors.

The next four units deal with the properties of simple circuits – their transient and alternating current response. Diode and transistor models, ac power and conversion of ac to dc, and ac measurement are discussed.

The remainder of the course deals with electronic circuits and lays particular stress upon the need to design circuits to meet specifications of noise, distortion, output voltage as well as gain and input and output impedance. These are dealt with through a series of simple case studies such as the design of a stabilized dc supply, a time base generator, a power amplifier and a servo-mechanism utilizing a discrete operational amplifier. These design studies will be supported by analyses, in terms of their significant properties, of important circuit elements such as the long tailed pair, the 741 operational amplifier, trigger circuits, etc.

Students will be expected to design and build most of these circuits, using their home kit, as part of the course and to bring their work to the summer school for checking.

This course is made up of 17 units of written correspondence material, 17 television and five radio programmes. Students are required to attend one week's residential summer school, and are urged to attend a number of evening or Saturday tutorial sessions. They have eight computer-marked assignments (CMAs) and four tutor-marked assignments (TMAs) to complete. The best six CMA grades and the best three TMA grades count toward the overall continuous assessment grade. Some of the TMA questions are based on the home experiments, which form an integral part of the course. Students may take a three hour examination at the end of the course.

The course is exceptional in its approach to the teaching of electronics design. No textbook satisfactorily covering the course has been identified.

Preparatory reading

Some students might find it helpful to read:
Brooks, A. M. P. (1963) *Basic Electrical Circuits*, Pergamon.

Set books

There are no set books for this course.

Course begins: February 1979
Course ends: November 1979
Units of work: 17
Course level: second
Qualifications obtainable: Course Certificate or Letter of Course Completion
Course tuition fee: £85 (excluding the 1979 summer school fee)
Returnable deposit for home experiment kit: £10
Application period: 3 April–10 October 1978

COMMUNITY EDUCATION COURSES 4

These courses, which are developed by the Community Education section of the Post-Experience Courses Unit, are short courses lasting between 8 and 14 weeks. They represent a departure from the degree level courses described elsewhere in this PROSPECTUS *both in terms of length and level of demand. Furthermore it should be noted that these courses do not form part of any other Open University study programme, and successful completion of any of these courses may not be used as credit towards an Open University degree or diploma.*

PARENT, HEALTH AND CONSUMER EDUCATION COURSES

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INTRODUCTION

The courses are of two types. The first type are courses which are related to the concerns of adults in their everyday lives and cover parent, health and consumer education. They are intended to help people tackle the everyday problems and challenges of family and community life and to encourage them to make their own decisions. These courses are activity based and are presented in a magazine format. They have been prepared in collaboration with outside organizations and are intended for a wide range of people. Detailed descriptions of these courses are given on pages 70 to 73.

The second type of course is based on material selected from existing Open University courses. This material, together with a specially written study guide and optional assignments, has been put together to produce short courses. The courses cover historical, cultural, political and environmental interests and encourage students to apply what they have learnt in their own communities. Detailed descriptions of these courses are given on page 74.

HOW TO APPLY

There are no formal entrance qualifications and you may apply direct for any of the Community Education courses by using the application slip on the last page of this *Prospectus*. Notes on how and when to apply are also set out on the last page. (Please note that this application slip and application procedure differ from those used for the courses in Section 3 of this *Prospectus*.)

COURSE TUITION

The University does not make any tutorial arrangements for these courses. In the case of courses covering parent, health and consumer education, networks of voluntary co-ordinators have been organized to assist in the formation of student self-help groups. This does not apply to courses drawn from existing material, but it is anticipated that some students following these courses will be members of local history, arts or environmental societies, or members of Women's Institutes, Townswomen's Guilds, LEA or WEA classes, and that these groups *may* help to organize local discussion groups, but this provision *cannot* be guaranteed.

It should be noted that the system of study as outlined in Section 2 of this *Prospectus* does not apply to these courses. Thus the University's regional facilities, including local study centres, tuition and counselling are *not* provided for these courses.

BROADCASTS

Broadcasts have been arranged to accompany these courses, and are very often an important feature of a course since they are linked to topics discussed in the course material. Television programmes are usually

shown on BBC2; the radio broadcasts are on Radio 3 VHF or Radio 4 VHF. The times of all programmes are sent to students before their courses commence.

ASSIGNMENTS

Each course has optional assessment that consists of computer-marked assignments (usually multiple choice questions). Successful completion of these assignments leads to the award of a Letter of Course Completion (Short Course). (Please note, as stated at the beginning of this Section, that the Letter of Course Completion awarded for Community Education courses *cannot* be used as a credit towards an Open University degree or diploma.) There are no examinations for these courses.

HOW MUCH WORK IS INVOLVED?

Each course involves about five or six hours work a week for the length of the course.

PARENT, HEALTH AND CONSUMER EDUCATION COURSES

P911 THE FIRST YEARS OF LIFE

This is the first in a series of three courses designed for all parents and parents-to-be. (Details of the other two, P912 *The Pre-School Child* and P913 *Childhood 5–10*, are given below.) The aim of these courses is not to tell parents the 'best' ways of bringing up children, but to help parents sort out for themselves the problems and challenges and then to make their own decisions about what to do. The courses are intended to help parents find out how their child develops and discuss some of the big questions which concern them – induced versus natural births; breast-feeding versus bottle feeding; returning to work after a baby; different ways of toilet training; how children see parents; the how and why of play; how to help children learn. It is intended that these courses can be taken even if the student is busy looking after a child, since each course involves about five hours' work a week for eight weeks. More than half the time is spent in activities like completing quizzes, observing a child's behaviour, or playing through simple games.

The First Years of Life is a course for parents-to-be and parents of children under two, and has been produced in collaboration with the Health Education Council. It consists of eight full-colour booklets covering the following topics:

Books 1 and 2 cover conception and progress through pregnancy. Topics include worries about drugs, smoking and miscarriages, antenatal care and family relationships during pregnancy. Other discussion points include – who will do what for the baby? How do you feel about breastfeeding? What will you tell your children about the new baby?

Books 3 and 4 take you step by step through birth – what happens, when and why, and how you feel about it all. The way you and your baby settle into a pattern of living together in the first three months is also looked at. You are asked to observe some of the things a newborn baby can do.

Books 5 and 6 trace the development of your baby's abilities from 3 months to 1 year – picking things up, babbling, the beginning of a desire to feed him or herself, the first words and the first steps. What do you do if the first word is 'no'?

Books 7 and 8 deal with development from 1 to 2 years. This period can be a time for conflicts and worries about being a parent. Topics include the developing relationship with your child, the wider opportunities available for play and meeting people. Some of the problems of growing up are also looked at – rewards and punishments . . . what to do about fears and nightmares.

The course also includes a resource pack which contains booklets, posters, leaflets and three records – on relaxation, talking and singing with your child.

Assessment

Assessment for the course consists of four computer-marked assignments, three of which must be passed in order to qualify for a Letter of Course Completion (Short Course).

Broadcasts

These are related to topics in the books, and are as follows:

Television
1. On the way – antenatal care
2. All yours! – the first two months together
3. The World at One – study of four one-year-olds
4. Clash! – parents discuss what behaviour worries them

Radio
1. Mums and Dads, Husbands and Wives – about your expectations and feelings about each other
2. Down in the dumps – a look at a common post-natal problem: depression
3. Baby talk – how language develops
4. As the twig is bent? – what influence on their child's development do parents have in the first two years?

Length of course: 8 weeks
Course begins: October 1978 and January 1979
Course ends: December 1978 and March 1979
Course fee: £10

Application period: 1 May–8 September 1978 (for October presentation)
1 May–17 November 1978 (for January presentation)

P912 THE PRE-SCHOOL CHILD

This course, which follows on from P911 *The First Years of Life*, is intended for fathers and mothers of children aged two to five, and has been produced in collaboration with the Pre-School Playgroups' Association. It consists of eight full-colour booklets covering the following topics:

Books 1 and 2 go through a child's day from waking to sleeping, highlighting some aspects of physical development. Topic titles include: Waking, Mealtimes, We all make demands, Clean and dry, Stories, Wills of their own, Dolls and Teddies, Looking at books.

Books 3 and 4 match the child's need for interest and challenge with the mother's need to get through the day's work. Topic titles include: Water in the sink, Talking while you work, Tidying up, A dollop of dough, Styles of learning.

Books 5 and 6 are chiefly concerned with times when parents and children leave home together. Some topics focus on the emotional development that is taking place as children grow from two to five. Topic titles include: Shopping, Pets, What happens when you die? Moving house, Parents have many faces, Talking about sex.

Books 7 and 8 cover the gradual separation of children from their parents, how this independence permits the widening of their social world. Topic titles include: Playing together, Pre-school groups, Joining a group, Time for school, Patterns of child-rearing, The changing parent.

The course also includes a resource pack which contains three records and three posters related to topics on talking, story-telling, music and woodwork; book suggestions for children and their parents; addresses of helpful organizations.

Assessment

Assessment for the course consists of four computer-marked assignments, three of which must be passed in order to qualify for a Letter of Course Completion (Short Course).

Broadcasts

These are an important feature of the course, and are related to the following topics in the course books:

Television	1	Give and take
	2	All in a day's work
	3	Going shopping
	4	Joining in
Radio	1	Talking to each other
	2	Naughty things
	3	When everything gets you down
	4	You tell us – a phone-in programme

Length of course: 8 weeks
Course begins: October 1978 and January 1979
Course ends: December 1978 and March 1979
Course fee: £10
Application period: 1 May–8 September 1978 (for October presentation)
1 May–17 November 1978 (for January presentation)

P913 CHILDHOOD 5-10

This course follows on from P912 *The Pre-School Child*. It aims to help parents contribute to the personal, social and intellectual development of their 5–10 year old children by ensuring that appropriate opportunities in the home, school and community are provided. The course considers factors which affect the health and happiness of children. It encourages parents to identify and create opportunities for their own children and to support their children's development towards independence. Students will consider how parent/parent and parent/child relationships influence their child's relationships with others and their child's attitudes to parenthood.

The course is activity based with practical exercises concerned with the evaluation and management of the physical and emotional environment of young children.

PLEASE NOTE THAT IT WILL NOT BE POSSIBLE TO APPLY TO TAKE THIS COURSE BEFORE THE SPRING OF 1979. It is hoped that further details, including details of assessment and broadcasts, will be available at that time. Please write to the Associate Student Central Office, The Open University, P.O. Box 76, Milton Keynes, MK7 6AN, if you wish to be placed on the mailing list for further details.

Length of course: 8 weeks
Course begins: October 1979

P931 CONSUMER DECISIONS

This course, which is being prepared in collaboration with the Consumers' Association and with financial assistance from the Department of Prices and Consumer Protection, is intended to help individuals to increase their effectiveness in choosing and buying goods and services. In seeking to achieve this aim the course focuses on three main stages of consumer decision-making, i.e.

pre-purchase	obtaining information about products; identifying your own particular needs and resources; deciding which products best meet your requirements
purchase	where and how to buy; how to resist sales pressure
post-purchase	what to do when something goes wrong; who to complain to and how.

The course activities focus on the individual consumer and will involve students in analysing their needs and applying general principles to specific purchases.

A handbook for consumers, specially written and produced for the course by the Consumers' Association will provide background information and guidance on shopping and services. It includes sections on budgeting; loans, credit and other ways of raising money; sources of information about products and their performance; labelling and packaging; safety and standards; your rights as a consumer; a practical guide to complaining; voluntary and official consumer protection bodies.

It is intended that this book should continue to be of use to students as a source of reference when they have completed the course, and one of the main purposes of the course will be to give students practice in using the information it contains.

The course itself contains eight magazine style course books, each of which will provide the basis of a week's work during the course. The books include case studies, suggestions for practical enquiries and other activities – all involving students in developing their personal skills in obtaining information, making decisions and dealing with people. Each book will focus on a different area of consumer expenditure – e.g. housing, clothes, cars, holidays – to illustrate different aspects of the decision-making process.

The course will also contain a resource pack including codes of practice, reprints of articles about consumers, handouts and leaflets from manufacturers, businesses and consumer groups, etc. – all of which will be linked to the course books and broadcasts.

It is hoped that students will form local self-help groups to exchange ideas and experiences during the course, and a network of co-ordinators will be established to help students to come together for this purpose.

Assessment

Assessment for the course consists of four computer-marked assignments, three of which must be passed in order to qualify for a Letter of Course Completion (Short Course).

Broadcasts

Four television programmes, integrated with the course books, will concentrate on developing the social skills which are essential to satisfactory trading transactions – especially where the customer has to resist sales pressure or where complaints and redress are involved.

Four radio broadcasts will look at some of the problems that can arise, and illustrate the various consumer advice and protection services in action.

Length of course: 8 weeks
Course begins: October 1978 and January 1979
Course ends: December 1978 and March 1979
Course fee: £10
Application period: 1 May–8 September 1978 (for October presentation)
1 May–17 November 1978 (for January presentation)

PST932 ENERGY IN THE HOME

This course is concerned with explaining how fuels are used in homes and helping students to find cheap and effective ways of reducing fuel use. The course also covers some of the wider issues of future energy supplies and energy use in society.

If you take this course you will be guided through a number of measurements and calculations which will enable you to work out the costs of using fuels in different appliances. These calculations can also be used to find out how much you could save by either simple changes or large schemes for insulating your home better. Throughout the course you will find useful hints and tips, things that cost you nothing, suggestions for small changes that cost a few pounds but can save a lot of fuel, and details on items like double glazing, that save a lot but also cost a lot. Throughout, the emphasis is on helping you to understand what goes on in your home and then helping you decide what to do about it.

The course contains eight units, each of which is

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roughly one week's work. The eight units are bound into four booklets. There are two other booklets, one containing tables which you fill in as you find out about your home, the other containing information on the optional assignment and the times of the four TV programmes. In addition you will receive a thermometer, to measure temperature in your home, and a book containing practical hints.

To give you an idea of some of the topics in the course here are a few of the questions that are tackled:

What is the cheapest way to save fuel? Only you can answer this for your own home because there are so many differences between one home and another. By taking a few measurements and doing a few sums you can quickly sort out what is likely to be the cheapest for you.

How can I decide what is worth doing? There are lots of reasons for deciding to do something, many of which are discussed. The most obvious is the comparison of financial costs and benefits. Here the calculations you do will show you what you could expect to save, and will also show you how to compare savings from different schemes. There are also lots of ways you can save on fuel without spending any money.

Does saving energy mean being uncomfortable? No it doesn't. Indeed if done wisely, cutting down your fuel use can increase the comfort in your home. Many people are uncomfortable precisely because draughts and cold windows are allowing heat to go out of their homes. Stopping these losses cuts your fuel bills and makes you feel more comfortable.

There are also parts of the course concerned with heating appliances, fuel used in heating water, cooking and so on, the future prices and availability of fuels, where to get grants for insulation, solar water heaters and how inflation might influence your decisions. The aim has been to try to include everything you might need to know to decide how to reduce your use of fuel and increase your comfort.

The course is being produced by the Energy Research Group at the Open University with the assistance of a grant from the Department of Energy. Advice and assistance are being given by the Department of Energy, the Consumers' Association, the British Gas Corporation, and other organizations and individuals.

Assessment

Assessment for the course consists of three computer-marked assignments, two of which must be passed in order to qualify for a Letter of Course Completion (Short Course).

Broadcasts

There will be four television programmes associated with the course. These will be related to the course books and will demonstrate some of the activities involved in the course.

Length of course: 8 weeks
Course begins: October 1978 and January 1979
Course ends: December 1978 and March 1979
Course fee: £10
Application period: 1 May–8 September 1978 (for October presentation)
1 May–17 November 1978 (for January presentation)

P921 HEALTH CHOICES

The aim of this course is to help people make their own choices about their way of life, particularly in areas affecting their physical and emotional well-being. After making choices the course will help the student to achieve the desired changes in his life style.

The course will contain three themes:

1 how to make personal decisions, with insight activities provided to help the student examine his lifestyle and understand why he behaves as he does;
2 basic information, which the student will need to understand if he is to make an informed choice as to what changes he would like to make;
3 action plans for implementing any changes he decides to make.

Because physical and emotional wellbeing cannot be treated as separate areas the influence of one on the other will be considered when dealing with:

1 Diet and nutrition.
2 Exercise and rest.
3 Basic hygiene and health choices.
4 Personal and sexual relationships.
5 Working life.
6 Stressful life styles and life events.
7 Leisure and recreation.

PLEASE NOTE THAT IT WILL NOT BE POSSIBLE TO APPLY TO TAKE THIS COURSE BEFORE THE SPRING OF 1979. It is hoped that further details, including details of assessment and broadcasts will be available by that time. Please write to the Associate Student Central Office, The Open University, P.O. Box 76, Milton Keynes, MK7 6AN, if you wish to be placed on the mailing list for further details.

Length of course: 8 weeks
Course begins: October 1979

COURSES FROM EXISTING MATERIAL

PA982 DOING HISTORY

Doing History is based on material from the Arts Faculty Foundation Course. It is a highly practical course and shows how to go about historical writing and research. It should, therefore, be of particular interest to members of local historical societies and groups, as well as teachers of history in schools and colleges.

The course first looks at the purpose and meaning of 'History' and shows that although history has definite rules and methods, it also needs both creativity and imagination on behalf of the historian.

It goes on to examine the types of course material which can be used by the historian, illustrating the differences between primary and secondary sources and showing how each of these has its place in historical research. This leads to an analysis of the ways of writing history, and an explanation of the principles and pitfalls of historical writing.

A major part of the course is a project in which students are encouraged to start a historical study of some aspect of their own locality, and so gain practical experience of historical research. Part of the course assessment is based on the project activities.

Students will need to obtain a copy of the following book, which is referred to in the course:
Dickens, A. G. *The Age of Humanism and Reformation*, Prentice Hall

Assessment

The course contains three computer-marked assignments, two of which must be passed in order to qualify the student for the award of a Letter of Course Completion (Short Course).

Broadcasts

There will be radio and television programmes associated with the course.

Length of course: 8 weeks
Course begins: February 1979
Course ends: May 1979
Course fee: £8
Application period: 1 September–15 December 1978

PD983 GOVERNMENT AND INDUSTRY

This course is based on material drawn from a Social Science course and involves students in a study of the relationship between government and industry.

The course first looks at how and why governments intervene in industrial decision making and it traces the way this process has developed from the seventeenth century to the present day. It concentrates particularly on government intervention since 1960, leading up to the unsuccessful attempts by the 1970 Conservative government to reduce the scale of this involvement.

Industry also has an effect on government policy and the course examines the ways in which individual companies can influence the government. It looks at this area from the point of view of both small firms and multi-national companies and illustrates the different ways in which they can affect government policies.

Finally, the course looks at how the workforce can influence the situation and considers the area of workers' participation. As well as providing information on this subject, the course includes a project in which students are encouraged to make a study in their own locality of the views of workers on participation and to compare their findings with the statements in the text. Part of the course assessment is based on the project activities.

Students will need to obtain a copy of the following textbook, which is referred to in the course:
Skuse, A. *Government Intervention and Industrial Policy*, Heinemann Educational Books.

Assessment

The course contains three computer-marked assignments, the last of these being linked to the project mentioned above. Two of the assignments must be passed in order to qualify the student for the award of a Letter of Course Completion (Short Course).

Broadcasts

There will be radio and television programmes associated with this course.

Length of course: 14 weeks
Course begins: May 1979
Course ends: August 1979
Course fee: £14
Application period: 1 May 1978–6 April 1979

FUTURE PLANS 5

In 1977, following the Report of the Committee on Continuing Education chaired by Sir Peter Venables, the University agreed to adopt a programme of continuing education in addition to its commitment to undergraduate and higher degree studies.

This will probably have implications in the future for the number and types of courses offered in the associate student programme.

In the more immediate future plans in the various areas are set out below. These should be read in conjunction with the descriptions of the relevant areas in sections 3 and 4.

1 *In-service Education of Teachers* (see page 13)

Plans are going ahead for a course on curriculum evaluation and development for presentation in 1981. In addition, the Faculty of Mathematics is preparing a course for both specialists and non-specialists on the development of mathematical thinking across the curriculum. This should be available in 1980.

In the longer term it is expected that other diplomas will be available in addition to the Diploma in Reading Development.

2 *Health and Social Welfare* (see page 19)

The Post-experience Courses Unit has under active consideration a proposal for a Diploma in Social Concern with a modular structure. Students who will have obtained a minimum of four Course Certificates in Health and Social Welfare studies would be eligible for the Diploma award. Further information about the progress of this proposal will be included in the prospectus for 1980. Among future courses under consideration are: Child Abuse, and Psychiatric Care and Rehabilitation in the Community. It is hoped that these may be presented in 1980 and 1982 respectively, but students are advised not to make firm plans on the basis of these proposals.

3 *Community Education* (see page 69)

Courses are under consideration in parent, health, consumer and employment education. In October 1980 it is hoped that the following courses may be offered:

Parent education *Adolescence*
Health/employment education *Planning Retirement*
Employment education *You and Your Job*.

The following courses, drawn from existing material, are being considered for possible presentation during 1979:

Industrial Archaeology
Water Conservation
Maintaining the Environment
Mansfield Park (a study of the novel by Jane Austen and its social context)

4 *Other developments from the Post-experience Courses Unit*

Management education is a new area of development, which is currently being explored. The first course, for 1979 or 1980 presentation, is likely to be an eight unit course entitled *Using Finance and Accounting*. This would be designed to give managers who have no background in accounting the acquaintance and practice with accounting terms and techniques necessary in their jobs.

5 *Courses drawn from the undergraduate programme*

It is hoped to increase further the range of courses drawn from the undergraduate programme.

Please note that the courses marked * in Section 3 are likely to be withdrawn after 1979.

The University has no definite commitment to presenting the courses indicated above in the years specified, and may change its plans as circumstances dictate. You are advised not to make any firm study plans on the basis of the information in this section.

RELATIONSHIP BETWEEN THE UNDERGRADUATE AND ASSOCIATE STUDENT PROGRAMMES

6

As we have already seen, the University recognizes that the courses it offers to undergraduate and associate students are not mutually exclusive and there are a number of courses which are included in both the undergraduate and associate student programme. These are shown in Table 1.

Table 1 Courses included in both the undergraduate and associate student programmes 1979

Course Code	Course Title	Undergraduate credit rating	Undergraduate level
A202	The Age of Revolutions	1	2
A241	Elements of Music	½	2
A301	War and Society	1	3
A306	Twentieth Century Poetry	1	3
A322	English Urban History 1500–1780	½	3
A351	Modern Art from 1848 to the Present: Styles and Social Implications	½	3
AM289	History of Mathematics	½	2
AMST283	Science and Belief: from Copernicus to Darwin	½	2
AST281	Science and the Rise of Technology since 1800	½	2
D203	Decision Making in Britain	1	2
D204	Fundamentals of Human Geography	1	2
D301	Historical Data and the Social Sciences	1	3
D302	Patterns of Inequality	1	3
D305	Social Psychology	1	3
D332	International Politics and Foreign Policy	½	3
DE206	Social work, community work and society	1	2
DE351	People and Work	½	3
E203	Curriculum Design and Development	1	2
E222	The Control of Education in Britain	½	2
E321	Management in Education	½	3
E341	Methods of Educational Enquiry: An Empirical Approach	½	3
E361	Education and the Urban Environment	½	3
M331	Integration and Normed Spaces	½	3
M351	Numerical Computation	½	3
MDT241	Statistics: an Interdisciplinary Approach	½	2
P251	The Handicapped Person in the Community	½	2
PE231	Reading Development	½	2
PET271	Technology for Teachers	½	2
PM951	Computing and Computers	½	2
PT272	Environmental Control and Public Health	½	2
PT281	Industrial Relations	½	2
S266	The Earth's Physical Resources	½	2
S334	Oceanography	½	3
SDT286	Biological Bases of Behaviour	½	2
ST294	Principles of Chemical Processes	½	2
T241	Systems Behaviour	½	2
T242	Systems Management	½	2
T262	Man-made Futures: Design and Technology	½	2
T273	Food Production Systems	½	2
T291	Instrumentation	½	2
T321	Telecommunication Systems	½	3
T341	Systems Modelling	½	3
T361	Control of Technology	½	3
T391	Control Engineering	½	3
TS282	Electromagnetics and Electronics	½	2

Students should also note that in the undergraduate programme of studies certain combinations of courses may not be counted for credit purposes. This limitation also applies when students wish to transfer credits from the associate student programme to the undergraduate programme. Table 2 sets out these excluded combinations.

Table 2 Courses which are excluded combinations: you may not count completion of both towards a BA degree

Course		Excluded combination with course	
D204	Fundamentals of Human Geography	D281	New Trends in Geography (presented 1972-76)
E203	Curriculum Design and Development	E283	The Curriculum: Context, Design and Development (presented 1972-75)
E222	The Control of Education in Britain	E221	Decision Making in British Educational Systems (presented 1974-78)
PE231	Reading Development	PE261	Reading Development (presented 1972-76)
E341	Methods of Educational Enquiry: an Empirical Approach	DE304	Research Methods in Education and the Social Sciences
E361	Education and the Urban Environment	E351	Urban Education (presented 1974-77)
PET271	Technology for Teachers	T100	The Man-made World: a Foundation Course
PM951	Computing and Computers	M251 M252	An Algorithmic Approach to Computing Computing and Computers
S266	The Earth's Physical Resources	Any course containing the component S26—	

Although the courses may be identical, undergraduate and associate students will be working towards different ends. The former usually will be taking these courses in order to gain a credit (or half-credit) towards their degree, whereas associate students will be working towards a Course Certificate or Letter of Course Completion.

It is accepted, however, that students who subsequently apply and gain admission to the undergraduate programme may wish to transfer Course Certificates gained in the associate student programme towards an undergraduate degree; similarly some students may wish to transfer credits accumulated for an undergraduate degree towards an associate student diploma such as the Diploma in Reading Development. Such transfers are achieved simply by linking the student's undergraduate and associate serial numbers on our computer file, so that a complete record is created. A Course Certificate gained in a course other than those listed in Table 1 cannot be transferred for credit purposes towards the BA degree.

An associate student who decides that he would like to register as an undergraduate should write as soon as possible to the Admissions Office, The Open University, P.O. Box 48, Milton Keynes, MK7 6AB (or ask at his Regional Office) for a copy of the *Guide for Applicants* and an application form.

Undergraduate students are normally required to begin their studies with courses at foundation level before proceeding to subsequent levels of study. Associate students who apply for admission as undergraduate students will not be exempt from these requirements but after obtaining a foundation course credit they may count Course Certificates obtained for courses listed in Table 1 as a credit or half credit as appropriate, towards the BA degree. STUDENTS SHOULD NOTE THAT A LETTER OF COURSE COMPLETION BY ITSELF IS NOT SUFFICIENT FOR THIS PURPOSE. The University will not give preference to applications from associate students, nor will such students be exempted from the requirement to start their work with a foundation course by virtue of courses passed in the associate student programme. The only students who are permitted to start at post-foundation level are those granted appropriate awards of directly transferred credits under the University's advanced standing policy. Information on this policy is contained in the *Guide for Applicants*.

A further restriction on the transfer of associate student course credits towards a BA degree is that of the honours credit maximum. Students should be aware that any courses which they wish to transfer to their undergraduate record will be counted towards the maximum number of credits permitted for the BA or BA (Hons) degree.

A student who wishes to transfer course credits gained in the undergraduate programme towards a diploma in the associate student programme should, in applying to the associate student programme, give his undergraduate serial number in the appropriate box on the form. No further action from the student is required.

Registered undergraduates of the Open University and current applicants for 1979 undergraduate foundation courses should note that, while the University does not prevent them from registering as an associate student at the same time as they are registered for an undergraduate course, it does ask them to take the following factors into account:

1 Second and higher level undergraduate courses are designed on the assumption that the student has benefited from study at the foundation level, and in the case of mathematics, science and technology courses the appropriate foundation level courses are recommended as prerequisite courses of study before proceeding to higher level courses.

2 There is a considerable difference in fee levels between a course offered as a part of the associate student programme and the fee for the course in the

undergraduate programme: for example, in 1978 the fee for course D305 *Social Psychology* is £95.00 in the associate student programme and £52.00 in the undergraduate programme; T321 *Telecommunication Systems* costs £65.00 in the associate student programme and £26.00 in the undergraduate programme.

3 No student may register for more than the equivalent of two full-credit courses in any academic year, spread across both programmes of study (see *How to Apply* for details).

THE HIGHER DEGREE PROGRAMME 7

The University's higher degree programme offers opportunities for advanced study and research for those who wish to analyse in depth a specific area of knowledge, or who wish to undertake independent academic research leading to an original contribution to the published work in a particular field of scholarship. The majority of Open University postgraduate students are external students, reading for a higher degree on a part-time basis using study facilities in their home areas. There is also a small number of places for full-time students at Walton Hall, the University's site at Milton Keynes.

Three higher degrees are offered – the Bachelor of Philosophy (BPhil), the Master of Philosophy (MPhil) and the Doctor of Philosophy (PhD) awarded on examination of a dissertation or thesis after the satisfactory completion of the equivalent of one, two or three years' full-time study respectively. These periods of study may be spread over longer periods of part-time work.

The normal entrance requirement for admission to post-graduate study is a first or upper second class Honours degree, or higher degree, of a British university. Applications are, however, considered from candidates who can show that their qualifications, professional experience or previous research are an appropriate preparation for postgraduate work within the proposed field of study. Further details about postgraduate study and copies of the current *Postgraduate Prospectus* may be obtained from the Higher Degrees Office, The Open University, PO Box 49, Milton Keynes, MK7 6AD.

COMMUNITY EDUCATION COURSES APPLICATION

HOW TO APPLY

Fill in, detach and send off the slip below with the fee for the course or courses you wish to take. Enter your name, address and other details on the left hand side of the slip and put a tick in the column indicated against the course or courses you wish to take on the right hand side of the slip. You should note that four of the courses (P911, P912, P931 and PST932) have alternative starting dates of *either* October 1978 *or* January 1979, and separate boxes are included on the slip so that you can indicate the starting date you prefer. Finally, you should include with your application a cheque or postal order made payable to The Open University for the total amount for *all* the courses you wish to take.

WHEN TO APPLY

Places may be limited so apply as soon as possible. Applications for all courses will be accepted from 1 May 1978. The closing dates for making applications are as follows:

All courses starting in October 1978 8 September 1978

All courses starting in January 1979 17 November 1978

PA982 *Doing History* 16 December 1978

PD983 *Government and Industry* 6 April 1979

It will not be possible to accept any applications after these dates, but it may be possible to take one of the courses at a future date, since the University hopes to continue presenting these courses at the same time of year in the future.

You may wish to apply for more than one course, but not at the same time. In this case you should simply complete the slip below for the first course, and send it to us enclosing a covering note asking for a further application slip.

PLEASE NOTE THAT IT WILL NOT BE POSSIBLE TO APPLY FOR THE TWO COURSES P921 *HEALTH CHOICES* OR P913 *CHILDHOOD 5–10* UNTIL THE SPRING OF 1979.

AGE

No formal entry qualifications are needed for these courses, but you must be 16 or over in the case of courses P911 and P912, or 21 or over in the case of all other courses, and you must also be living in the United Kingdom during the course. (The University is also currently considering a proposal to lower the age limit to 16 for P931 and PST932.)

FEES

The fees for each course are shown on the application slip below. Please note that we cannot return your fee once the first course material has been sent to you, even if you are not able to complete the course.

APPLICATION SLIP

(All information will be strictly confidential to the Open University)

Please enter your name, address and other details below and tick the course(s) you wish to take on the right hand side of this slip. You should then return this slip and payment (cheques/P.O.s made payable to 'The Open University') to:

The Associate Student Central Office,
The Open University,
P.O. Box 76,
Milton Keynes MK7 6AN

PLEASE USE CAPITAL LETTERS

TITLE Mr. Mrs. Miss, Ms. etc. | INITIALS of first name(s)

SURNAME

Q02 CORRESPONDENCE ADDRESS IN FULL (Limit to 56 characters including spaces)

POSTCODE

Q03 Sex - Write M or F | DATE OF BIRTH - Write in figures e.g. DAY MONTH YEAR (09 02 53)

DAY TELEPHONE NO. (If you have one)

Q01 FOR OFFICE USE

SERIAL NUMBER | DATE RECEIVED | COURSE | STATUS | AMOUNT | METHOD

Please tick below the course(s) you wish to take:-

OCTOBER 1978 START	FEE	TICK	REFUND *		JANUARY 1979 START	FEE	TICK	
P911 The First Years of Life	£10			D	P911 The First Years of Life	£10		E
P912 The Pré-School Child	£10			D	P912 The Pre-School Child	£10		E
P931 Consumer Decisions	£10			D	P931 Consumer Decisions	£10		E
PST932 Energy in the Home	£10			D	PST932 Energy in the Home	£10		E

*Tick this box if you wish your fee to be returned to you if the October course is full. Leave blank if you wish your application and fee to carry over to January.

FEBRUARY 1979 START				MAY 1979 START			
PA982 Doing History	£8		F	PD983 Government and Industry	£14		F

I wish to take the above course(s) and I enclose a cheque/PO for £.....

Signed..... Date.....

ACKNOWLEDGEMENT OF YOUR APPLICATION

You will be sent a letter of acknowledgement for *each course* saying you are on the course – or that it is already full. You should receive your acknowledgement within three weeks or so of your application, and if you do not do so you should contact the Associate Student Central Office in case your application has gone astray. If you apply for more than one course you may receive your acknowledgements on different days.

IF THE COURSE IS FULL

Admission is on a 'first come, first served' basis. If you apply for a course starting in October and there are no places left you may wish to carry over your application and fee to the January presentation instead. We will, in fact, assume that you wish to do this unless you tick the box headed 'Refund' on the slip, in which case we will return your application and fee to you.

YOUR LEARNING PACKAGE

If you are accepted for a course you will normally receive the learning package through the post about two weeks before the start of the course.

SERIAL NUMBER/CHANGE OF ADDRESS

Your letter of acknowledgement will give a serial number (one for each course). Please quote this number if you need to contact the Associate Student Central Office about your application or the course. *Please notify us quoting the number(s) if you change your address.*

SPECIAL DIFFICULTIES

If you have any special difficulties (for example sight or hearing problems) which might make it difficult for you to follow the course, please send us details in a separate letter to be returned with the slip, and we will advise you how far we can help.

CONFIDENTIALITY OF DATA

All information supplied by applicants and students will be treated as strictly confidential to the University. It will not be released to any persons or institution outside the University without your consent, and any statistical data published by the University will not enable individual applicants or students to be identified.